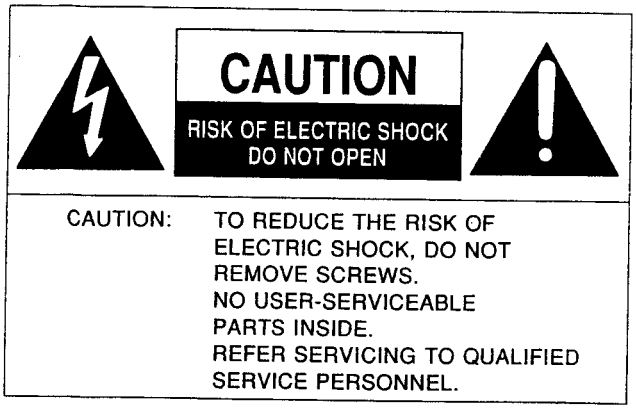
Technics

KEYBOARD

SX-KN200
SX-KN400
SX-KN220
SX-KN440

Vol. 1

QQTG0033A


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE SCREWS.
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

FOR CANADA
This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

POUR CANADA
L'interférence radioélectrique générée par cet appareil numérique de type B ne dépasse pas les limites énoncées dans le Règlement sur les perturbations radioélectriques, section appareil numérique, du Ministère des Communications.

Technics

KEYBOARD

SX-KN220
SX-KN440

(ENGLISH)

■ The **SX-KN220** Keyboard is the same as the SX-KN200 Keyboard with the added *Touch Response* function. With this feature, you control the volume by playing the keys harder or softer. All other functions are as described in the included SX-KN200 Owner's Manual.

• Note that the SX-KN220 control panel differs slightly from that of the SX-KN200.

■ The **SX-KN440** Keyboard is the same as the SX-KN400 Keyboard but with a *higher output* (10W×2). All other functions are as described in the included SX-KN400 Owner's Manual.

• Note that the SX-KN440 control panel differs slightly from that of the SX-KN400.

(DEUTSCH)

■ Das Keyboard-Modell **SX-KN220** ist mit dem Modell SX-KN200 identisch, mit Ausnahme der zusätzlichen *Anschlagsdynamik-Funktion*. Diese Funktion erlaubt Ihnen, die Lautstärke durch härteres oder weicheres Anchlagen der Manualtasten zu steuern. Alle anderen Funktionen entsprechen den Beschreibungen in der mitgelieferten Bedienungsanleitung für das Modell SX-KN200.

• Beachten Sie, daß sich die Bedienfelder der Modelle SX-KN220 und SX-KN200 geringfügig unterscheiden.

■ Das Keyboard-Modell **SX-KN440** ist mit dem Modell SX-KN400 identish, weist aber über eine *höhere Ausgangsleistung* (10W×2) auf. Alle anderen Funktionen entsprechen den Beschreibungen in der mitgelieferten Bedienungsanleitung für das Modell SX-KN400.

• Beachten Sie, daß sich die Bedienfelder der Modelle SX-KN440 und SX-KN400 geringfügig unterscheiden.

(FRANÇAIS)

■ Le clavier **SX-KN220** est identique au clavier SX-KN200 avec la fonction "*Touch Response*" ajoutée. Grâce à cette fonction vous pourrez contrôler le volume en jouant de façon plus fort ou bien plus doux sur les touches. Toutes les autres fonctions sont décrites dans le mode d'emploi pour le SX-KN200 fourni.

• Note: Le panneau de commande du SX-KN220 est un peu différent de celui du SX-KN200.

■ Le clavier **SX-KN440** est identique au clavier SX-KN400 mais présente une *puissance de sortie plus importante* (10W×2). Toutes les autres fonctions sont décrites dans le mode d'emploi pour le SX-KN400 fourni.

• Note: Le panneau de commande du SX-KN440 est un peu différent de celui du SX-KN400.

(ESPAÑOL)

■ El teclado **SX-KN220** es el mismo que el SX-KN200 al que se ha agregado la *función de respuesta de toque* (Touch Response). Este detalle permite controlar el volumen del sonido ejecutando las teclas con más o menos fuerza. Las demás funciones son las descritas en las Instrucciones de manejo del SX-KN200 que viene con el teclado.

• El panel de control del SX-KN220 es ligeramente diferente del SX-KN200.

■ El teclado **SX-KN440** es el mismo que el SX-KN400 pero tiene una *salida mayor* (10W×2). Las demás funciones son las descritas en las Instrucciones de manejo del SX-KN400 que viene con el teclado.

• El panel de control del SX-KN440 es ligeramente diferente del SX-KN400.

(NEDERLANDS)

■ Het **SX-KN220** keyboard is hetzelfde als het SX-KN200 keyboard met toegevoegde *aanslag-respons functie*. Met deze functie kunt u het volume regelen door de toetsen harder of zachter te bespelen. Alle overige functies zijn zoals beschreven in de bijgeleverde gebruiksaanwijzing voor de SX-KN200.

• Het bedieningspaneel van de SX-KN220 echter verschilt enigszins van dat van de SX-KN200.

■ Het **SX-KN440** keyboard is hetzelfde als het SX-KN400 keyboard, maar heeft een *groter uitgangsvermogen* (10W×2). Alle overige functies zijn zoals beschreven in de bijgeleverde gebruiksaanwijzing voor de SX-KN400.

• Het bedieningspaneel van de SX-KN440 echter verschilt enigszins van dat van de SX-KN400.

(ITALIANO)

■ La tastiera **SX-KN220** è identica alla tastiera SX-KN200 con la funzione "*Touch Response*". Grazie a questa particolarità, potete controllare il volume suonando in modo più forte oppure più dolce i tasti. Tutte le altre funzioni sono descritte nelle istruzioni per l'uso del SX-KN200.

• Nota: Il pannello di controllo del SX-KN220 è leggermente diverso da quello del SX-KN200.

■ La tastiera **SX-KN440** è identica alla tastiera SX-KN400 ma presenta una *uscita più importante* (10W×2). Tutte le altre funzioni sono descritte nelle istruzioni per l'uso del SX-KN400.

• Nota: Il pannello di controllo del SX-KN440 è leggermente diverso da quello del SX-KN400.

(中文)

■ **KN220**是對原有的KN200上增添接觸響應功能的型號。由於本功能的作用，隨着彈鍵力量的強弱。所響出的音量也有強弱的變化。
除了本項功能以外，別的各項內容全面與KN200相同，因此本琴的操作均宜參閱所附的使用說明書中KN200型部分。

• 只有KN220型面板上的部分表示形狀，不與KN200相同。

■ **KN440**型的輸出功率比KN400型更大(10W×2)。此外，其他各項功能全面與KN400相同，爲此本琴操作均宜參閱所附的使用說明書KN400部分。

• 只有KN440型面板上的部分表示形狀，不與KN400相同。

(NORSK)

■ Keyboarden **SX-KN220** er identisk med SX-KN200, men har *Touch Response* som en ekstra funksjon. Ved à bruke Touch Response kan du styre lydstyrken fra en tangent ved å trykke hardt eller mjukt på den. Alle andre funksjoner brukes som forklart i bruksanvisningen for SX-KN200.

• Kontrollpanelet på SX-KN220 er ikke helt det samme som på SX-KN200.

■ Keyboarden **SX-KN440** er den samme som SX-KN400, men har *større utgangseffekt* (10W×2). Alle andre funksjoner brukes som forklart i bruksanvisningen for SX-KN400.

• Kontrollpanelet på SX-KN440 er ikke helt det samme som på SX-KN400.

(DANSK)

■ **SX-KN220** Keyboard svarer til SX-KN200 keyboardet, men byder også på *Touch Response funktion*. Med denne finesse kan lydstyrken kontrolleres ved at trykke hårdere eller blidere på tangenterne. Alle andre funktioner fungerer som beskrevet i den medfølgende SX-KN200 Bruksanvisning.

• Bemærk at SX-KN220 kontrolpanelet adskiller sig en smule fra det på SX-KN200.

■ **SX-KN440** Keyboard er identisk med SX-KN400, men har *større output* (10W×2). Alle andre funktioner fungerer som beskrevet i den medfølgende SX-KN400 Bruksanvisning.

• Bemærk at SX-KN440 kontrolpanelet adskiller sig en smule fra det på SX-KN400.

(SVENSKA)

■ Keyboardet **SX-KN220** är detsamma som SX-KN200, men har dessutom en *anslagsavkännande funktion.* Med denna funktion reglerar du ljudnivån genom att spela hårdare eller mjukare på tangenterna. Alla övriga funktioner är desamma som beskrivs i den medföljande brugsvejledningen för SX-KN200.

• Observera att kontrollpanelen på SX-KN220 skiljer sig en aning från kontrollpanelen på SX-KN200.

■ Keyboardet **SX-KN440** är detsamma som SX-KN400, men det har en *större uteffekt* (10W×2). Alla övriga funktioner är desamma som beskrivs i den medföljande brugsvejledningen för SX-KN400.

• Observera att kontrollpanelen på SX-KN440 skiljer sig en aning från kontrollpanelen på SX-KN400.

(SUOMI)

■ **SX-KN220** Keyboard on sama kuin SX-KN200 Keyboard, mutta siinä on lisänä *kosketusvastetoiminto.* Tällä toiminnolla voit säätää äänenvoimakkuutta painamalla näppäimiä voimakkaammin tai heikommin. Kaikki muut toiminnot ovat samat kuin ne, jotka on kuvattu SX-KN200:n käyttöohjeessa.

• SX-KN220:n säädinseinämä eroaa hieman SX-KN200:n säädinseinämästä.

■ **SX-KN440** Keyboard on sama kuin SX-KN400 Keyboard, mutta siinä on *suurempi lähtöteho* (10W×2). Kaikki muut toiminnot ovat samat kuin ne, jotka on kuvattu SX-KN400:n käyttöohjeessa.

• SX-KN440:n säädinseinämä eroaa hieman SX-KN400:n säädinseinämästä.

For USA only

"This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

— reorient the receiving antenna
— relocate the electronic musical instrument with respect to the receiver
— move the electronic musical instrument away from the receiver
— plug the electronic musical instrument into a different outlet so that electronic musical instrument and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: 'How to Identify and Resolve Radio-TV Interference Problems.' This booklet is available from the U.S. Government Printing Office, Washington, DC 20402. Stock No. 004-000-00345-4."

Bescheinigung des Herstellers/Importeurs

Hiermit wird bescheinigt, daß der/die/das

TECHNICS, Model No. SX-KN220/SX-KN440

(Gerät, Typ, Bezeichnung)

in Übereinstimmung mit den Bestimmungen der

Vfg 1046/1984

(Amtsblattverfügung)

funkentstört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

PANASONIC DEUTSCHLAND GMBH

Name des Herstellers/Importeurs

Specifications

		SX-KN220	SX-KN440
KEYBOARD		61 KEYS (TOUCH RESPONSE)	
SOUND GENERATOR		PCM	
MAXIMAL NOTE NUMBER PRODUCING SIMULTANEOUSLY		11 NOTES	
SOUND	POLY (KN220) POLY 1, 2, ACCOMP (KN440)	PIANO 1, 2, ELECTRIC GRAND PIANO, HARPSICHORD, ELECTRIC PIANO 1, 2, GUITAR, JAZZ GUITAR, SOLID GUITAR, HAWAIIAN GUITAR, MUTE GUITAR, ROCK GUITAR, GLOCKEN, BANJO, CLAVI, XYLOPHONE, VIBETONE, KALIMBA, PIPE ORGAN 1, 2, JAZZ ORGAN 1, 2, STEEL DRUM, POP ORGAN, VIOLIN, STRINGS, SYNTH STRING, BRASS, TRUMPET, SYNTH BRASS 1, 2, FRENCH HORN, TROMBONE, ACCORDION, TENOR SAX, ALTO SAX, OBOE, CLARINET, HARMONICA, PAN FLUTE, FLUTE, WHISTLE, SPEICAL 1, 2, 3, 4, 5, 6 (WITH VARIATION FOR EACH SOUND)	
	BASS	—	ACOUSTIC 1, 2, ELECTRIC 1, 2, CHOPPER 1, 2, ORGAN 1, 2, BOWED BASS, CELLO, TUBA, SYNTH 1, 2, 3, 4, 5
EFFECT	DIGITAL CELESTE	○ (POLY)	○ (POLY 1, 2)
	SUSTAIN	○ (POLY, ACCOMP 1, 2 & 3, BASS)	○ (POLY 1, 2, ACCOMP 1, 2, 3, BASS)
	MODULATION	—	VIBRATO ON, OFF
	PITCH BEND	—	○ (PITCH BEND WHEEL)
TRANSPOSE		○	
TECHNI-CHORD		○	
RHYTHM		MARCH 1, 2, COUNTRY, WALTZ, SWING 1, 2, DIXIE, JAZZ WALTZ, 8 BEAT 1, 2, ROCK'N'ROLL, SHUFFLE, ROCK BALLAD, LATIN 1, 2, BOSSA NOVA, 16 BEAT 1, 2, JAZZ ROCK, FUNK, SWING ROCK, DISCO, LATIN ROCK 1, 2 (WITH VARIATION FOR EACH RHYTHM)	MARCH 1, 2, COUNTRY, WALTZ, TANGO, LATIN 1, 2, BIG BAND, JAZZ COMBO 1, 2, DIXIE, JAZZ WALTZ, SAMBA, BOSSA NOVA, 8 BEAT 1, 2, ROCK'N'ROLL, SHUFFLE, ROCK BALLAD, LATIN ROCK 1, 2, 16 BEAT 1, 2, JAZZ ROCK, FUNK, SWING ROCK, DISCO 1, 2 (WITH VARIATION FOR EACH RHYTHM)
	CONTROL	START/STOP, SYNCHRO & BREAK, FILL IN, INTRO & ENDING, TEMPO	
	MANUAL PERCUSSION	—	○
	KEYBOARD PERCUSSION	34 KEYS	
AUTO PLAY CHORD		ONE-FINGER, FINGERED, MEMORY	
ACCOMP PART		—	1, 2, 3
ONE TOUCH PLAY		○	
PANEL MEMORY		—	SET, 1~4
SEQUENCER		2 TRACKS (PART: POLY, ACCOMP/CHORD) STRAGE CAPACITY: APPROX. 1600 NOTES INPUT MODE: REAL TIME, STEP (ACCOMP/CHORD ONLY)	3 TRACKS (PART: POLY 1, 2, ACCOMP/CHORD) STRAGE CAPACITY: APPROX. 1600 NOTES INPUT MODE: REAL TIME, STEP (ACCOMP/CHORD ONLY)
COMPOSER		—	5 TRACKS (PART: DRUMS, BASS, ACCOMP 1, 2, 3) STRAGE CAPACITY: APPROX. 600 NOTES INPUT MODE: REAL TIME EDIT FUNCTION: CLEAR, INSTR ERASE, QUANTIZE, BEAT
DISPLAY		○	
DEMO		○	
CONTROL		BALANCE, SUB BALANCE/MIDI	BALANCE, SUB BALANCE/MIDI, CONDUCTOR (POLY 1, 2, BASS, KEYBOARD PERCUSSION)
MIDI		PART (POLY, BASS, ACCOMP 1, 2, 3, DRUMS, CONTROL), BASIC CHANNEL (1~16), RECEIVE MODE, TRANSMIT MODE, LOCAL CONTROL, PROGRAM CHANGE, NOTE ONLY, MIDI CLOCK, START/STOP	PART (POLY 1, 2, BASS, ACCOMP 1, 2, 3, DRUMS, CONTROL), BASIC CHANNEL (1~16), RECEIVE MODE, TRANSMIT MODE, LOCAL CONTROL, PROGRAM CHANGE, PANEL MEMORY PROGRAM CHANGE, NOTE ONLY, MIDI CLOCK, START/STOP
TERMINALS		HEADPHONE TERMINAL, LINE OUT (R/R+L), MIDI TERMINAL (IN, OUT), FOOT SWITCH	HEADPHONE TERMINAL, LINE OUT (R/R+L, L), MIDI TERMINAL (IN, OUT, THRU), FOOT SWITCH, EXPRESSION PEDAL
OTHERS		PLAY SWITCH, MAIN VOLUME	POWER SWITCH, MAIN VOLUME
OUTPUT		2.5W×2	10W×2
SPEAKERS		12cm×2	12cm×2
POWER REQUIREMENT		9~12 V DC (WITH EXCLUSIVE AC ADAPTOR SY-AD1)	90W, 60W (NORTH AMERICA AND MEXICO) AC120/220/240V 50/60Hz, AC120V 60Hz (NORTH AMERICA AND MEXICO)
DIMENSIONS (W×H×D)		95.1 cm×14.7 cm×36.6 cm (37-7/16"×5-25/32"×14-13/32")	
NET WEIGHT		8.0 kg (17.6 lbs)	8.9 kg (19.6 lbs)
ACCESSORIES		MUSIC STAND, AC ADAPTOR	MUSIC STAND, AC CORD

Technics

OWNER'S MANUAL
MODE D'EMPLOI
INSTRUCCIONES DE MANEJO
使用說明書

VOL. 1

ENGLISH
FRANÇAIS
ESPAÑOL
中文

Caution

Voltage (except North America and Mexico)
Be sure the voltage adjuster (KN200: located on the AC adaptor, KN400: located on the rear panel) is in accordance with local voltage in your area before using this unit. Use a screwdriver to set the voltage adjuster to the local voltage.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

BEFORE YOU PLAY, PLEASE READ THE CAUTIONARY COPY APPEARING ON PAGE 27.

IMPORTANT (for GREAT BRITAIN)
THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:
BLUE —NEUTRAL
BROWN—LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is mark with the letter L or coloured RED.

Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

This apparatus was produced to BS 800: 1977.

Attention

Tension (à l'exception de l'Amérique du nord et le Mexique)
Avant de mettre cet appareil sous tension s'assurer que le sélecteur de tension situé sur l'adaptateur CA (KN200) ou sur le panneau arrière (KN400) est réglé sur la tension locale. Pour régler le sélecteur de tension utiliser un tournevis plat (–).
Avant toute utilisation, prière de lire l'avertissement apparaissant à la page 59.

Precaución

Tensión (excepto América del Norte y México)
Cerciórese de que el ajustador de tensión, situado en el adaptador de C.A. (KN200) o en el panel posterior (KN400), esté ajustado al valor de la tensión de su residencia. Efectúe esta comprobación antes de utilizar el instrumento. Para ajustar la tensión emplee un destornillador para posicionar el ajustador de tensión al valor correspondiente.
Antes de empezar a tocar, lea las precauciones de la página 91.

注意事項

電壓(不包括北美洲地域及墨西哥。)

當使用之前，應確認調壓器(KN200：設於AC適配器，KN400：設於背面盤上)的數值是否符合該地區的電壓。如不符合時，要用螺絲刀來旋轉調壓電鈕，對合到所用電壓位置，才可使用。

用本琴演奏之前，請仔細閱讀第73頁注意事項，以便正確使用。

Before you play

For a long and pleasurable use of this instrument, and to gain a thorough understanding of your KN Series Keyboard's wonderful capabilities, it is strongly recommended that you first read through this Owner's Manual once.

The Owner's Manual is comprised of the following parts.

BASIC FUNCTIONS	Please read all of this part.
VOL. 1:	This volume includes an explanation of basic procedures and some important points you should be aware of for proper operation of your instrument.
PRACTICAL APPLICATIONS	Read the parts which are relevant to the functions you wish to use.
VOL. 2:	This volume comprises a detailed explanation of sound, effect and rhythm.
VOL. 3:	This volume comprises a detailed explanation of **SEQUENCER**, **COMPOSER**, Function Setting and MIDI.
REFERENCE GUIDE	Reference guide for the contents of the **SOUND VARIATION** and **ONE TOUCH PLAY** settings.

Contents

Names and functions 4

Basic operating guide 6
- Setting up (KN200) 6
- Setting up (KN400) 7
- Playing the keyboard (KN200) 8
- Playing the keyboard (KN400) 9

Listen to the demonstration tune 10
- Demonstration performance 10

Selecting sounds 11
- Using the Sound Select (KN200) 11
- Using the Sound Select (KN400) 12

Playing automatic rhythms 13
- Listen to a preset rhythm 13
- Control the rhythm 14

Automatic accompaniment 15
- Use the AUTO PLAY CHORD 15

Storing a chord progression 17
- Storing a chord progression in the Sequencer 17
- Playing back the chord progression 19

Storing a performance 20
- Storing your performance in the Sequencer ... 20
- Playing back your performance 22

Creating a rhythm pattern (KN400) 23
- Storing a rhythm pattern in the Composer 23
- Playing back the rhythm pattern 25

Options and connections 26

Cautions for safest use of this unit 27

Symptoms which appear to be signs of trouble 28

Index 31

Specifications 130

ENGLISH

Names and functions

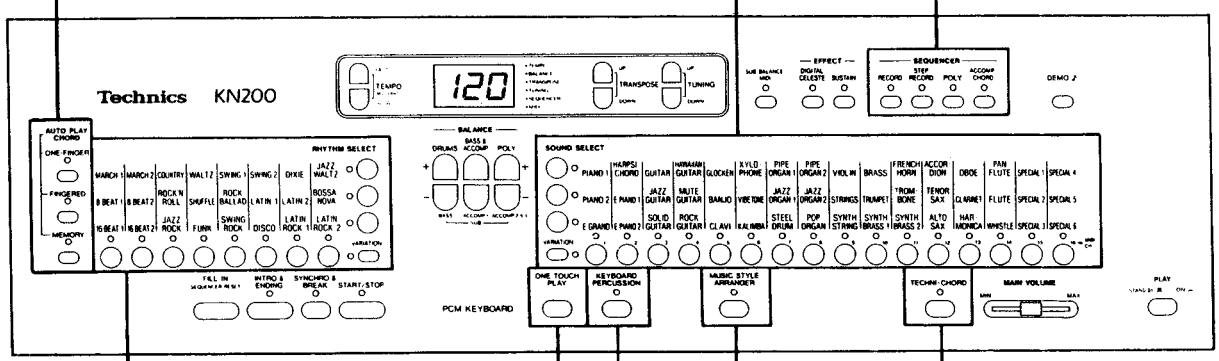
KN200

ENGLISH

AUTO PLAY CHORD
You can use automatic accompaniment patterns which match the rhythm. (Refer to Vol. 2, page 14.)

SEQUENCER
You can record your entire performance or store the chord progression for the automatic accompaniment. (Refer to Vol. 3, page 3.)

SOUND SELECT
You can select 48 kinds of sounds. (Refer to page 11.)



TECHNI-CHORD
A harmony is produced when a single key is pressed.
(Refer to Vol. 2, page 18.)

RHYTHM SELECT
You can select 24 kinds of rhythm patterns. Also, you can produce an intro and fill-in patterns. (Refer to Vol. 2, page 9.)

MUSIC STYLE ARRANGER
Enjoy colorful changes in the keyboard sounds during the **AUTO PLAY CHORD** performance. (Refer to Vol. 2, page 19.)

KEYBOARD PERCUSSION
You can play the percussion sound. (Refer to Vol. 2, page 12.)

ONE TOUCH PLAY
Just by selecting a rhythm and pressing this button, the sounds and effects ideal for the melody are set. (Refer to Vol. 2, page 19.)

Names and functions

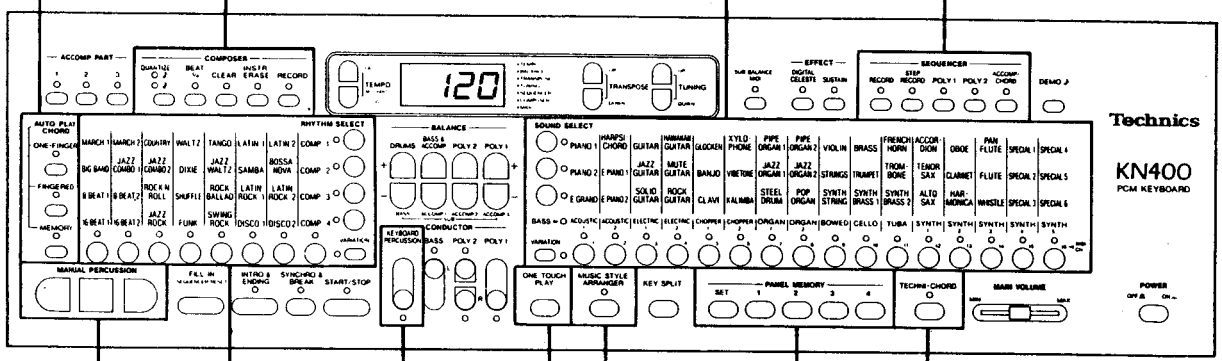
KN400

AUTO PLAY CHORD
You can use automatic accompaniment patterns which match the rhythm. (Refer to Vol. 2, page 14.)

SEQUENCER
You can record your entire performance or store the chord progression for the automatic accompaniment. (Refer to Vol. 3, page 3.)

SOUND SELECT
You can select 48 kinds of sounds. (Refer to page 12.)

COMPOSER
Create your original accompaniment pattern. (Refer to Vol. 3, page 14.)



KEYBOARD PERCUSSION
You can play the percussion sound. (Refer to Vol. 2, page 12.)

TECHNI-CHORD
A harmony is produced when a single key is pressed. (Refer to Vol. 2, page 18.)

PANEL MEMORY
Store the settings of the panel. (Refer to Vol. 2, page 8.)

RHYTHM SELECT
You can select 28 kinds of rhythm patterns. Also, you can produce an intro and fill-in patterns. (Refer to Vol. 2, page 9.)

MUSIC STYLE ARRANGER
Enjoy colorful changes in the keyboard sounds during the **AUTO PLAY CHORD** performance. (Refer to Vol. 2, page 19.)

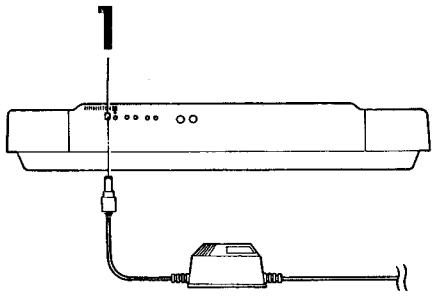
ONE TOUCH PLAY
Just by selecting a rhythm and pressing this button, the sounds and effects ideal for the melody are set. (Refer to Vol. 2, page 19.)

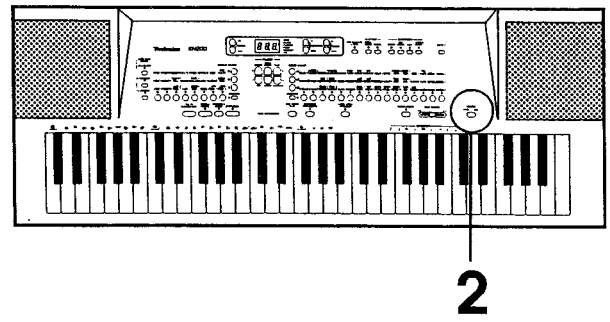
MANUAL PERCUSSION
A percussion sound is produced when the button is pressed. (Refer to Vol. 2, page 13.)

ENGLISH

Basic operating guide

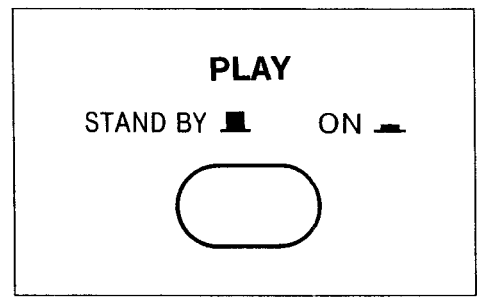
Setting up KN200



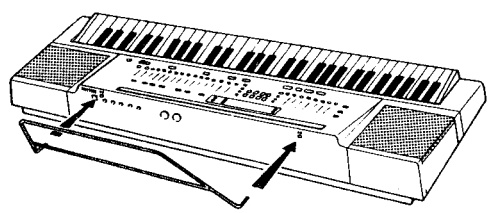


1 Use the included AC adaptor to connect the instrument to an outlet.

2 Press the **PLAY** button to turn it on.



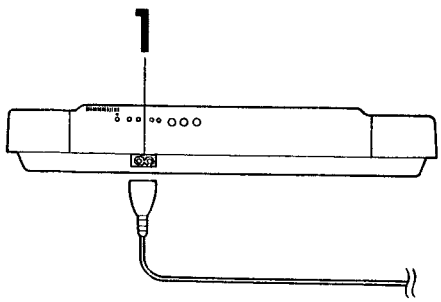
Music stand

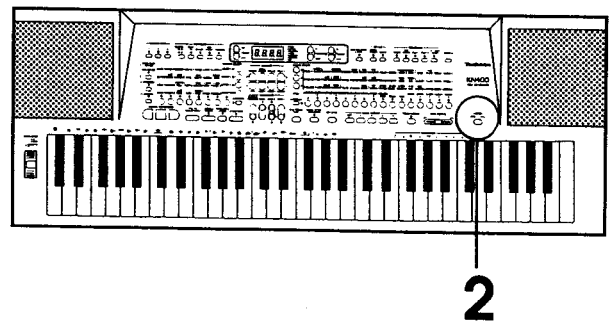


Set up the included music stand as shown in the illustration.

- Use only the included AC adaptor (SY-AD1). Use of other AC adaptors may cause maloperation or even damage to your instrument.
- When the keyboard is turned off, all of the stored memories and settings return to their initialized status.

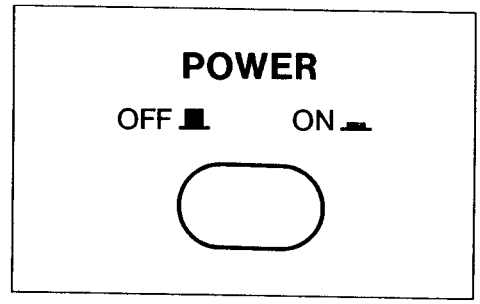
Setting up KN400



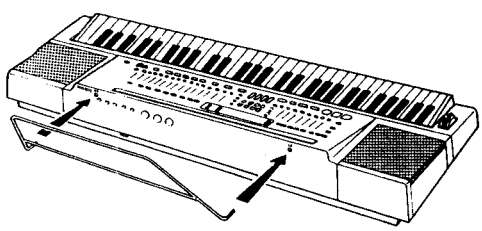


1 Plug the included power cord into an outlet.

2 Press the **POWER** button to turn it on.



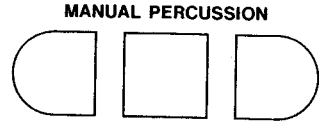
Music stand

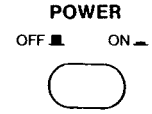


Set up the included music stand as shown in the illustration.

About initializing the settings

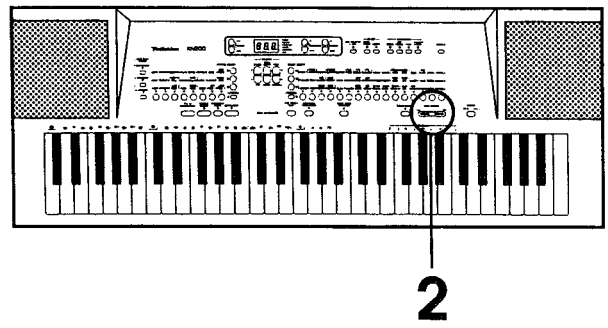
The KN400 has various storable settings and memories. To reset all the functions and memories to their initialized settings, while pressing all three **MANUAL PERCUSSION** buttons at the same time, turn on the **POWER** button.





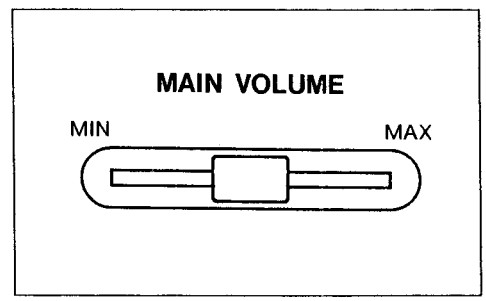
ENGLISH

Playing the keyboard KN200



1 Play the keyboard. You hear the **PIANO** sound.

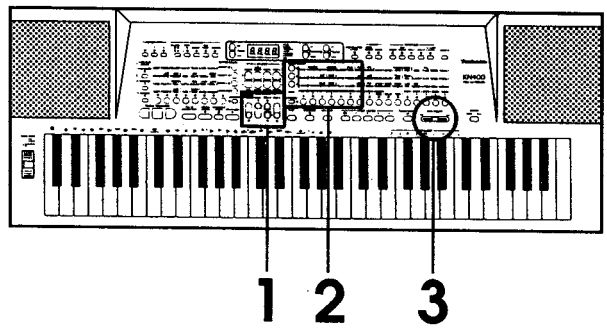
2 Set the **MAIN VOLUME** to an appropriate level with the sliding control.



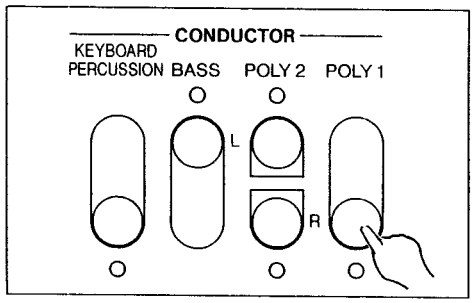
You can produce up to 11 notes at the same time.

- If headphones are connected, the sound from the internal speakers is turned off. Use headphones, for example, to play at night or at other times you wish to avoid disturbing others. (Refer to page 26.)

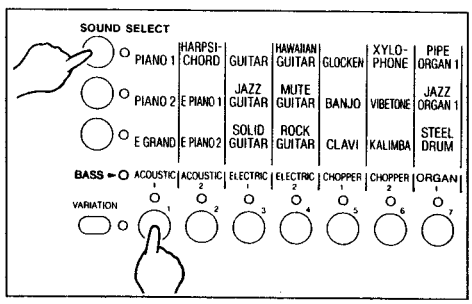
Playing the keyboard KN400



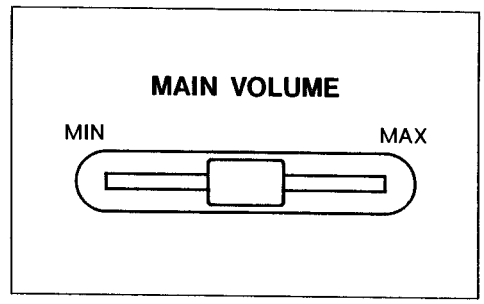
1 In the **CONDUCTOR** section, find the **POLY 1** button and press it to turn it on.



2 In the **SOUND SELECT** matrix, use the buttons in the vertical and horizontal rows to select the **PIANO 1** sound.



3 Set the **MAIN VOLUME** to an appropriate level with the sliding control.



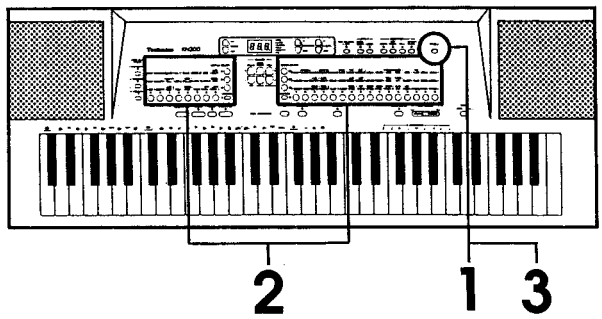
- You can produce up to 11 notes at the same time.
- The KN400 features Touch Response, by which you control the volume by playing the keys harder or softer.
- If headphones are connected, the sound from the internal speakers is turned off. Use headphones, for example, to play at night or at other times you wish to avoid disturbing others. (Refer to page 26.)

Listen to the demonstration tune

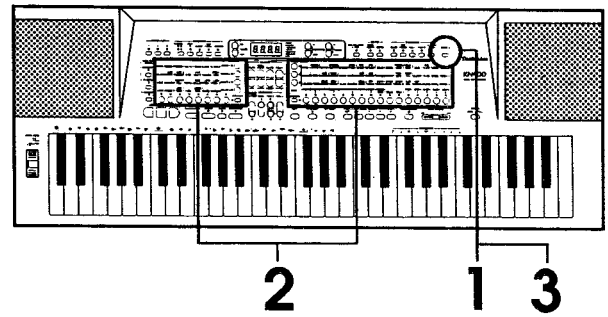
Demonstration performance

18 demonstration performances have been preset in your keyboard. Listen to the demonstration and you will hear what kind of performance is possible by using the PCM life-like sounds and various capabilities of the KN200/KN400.

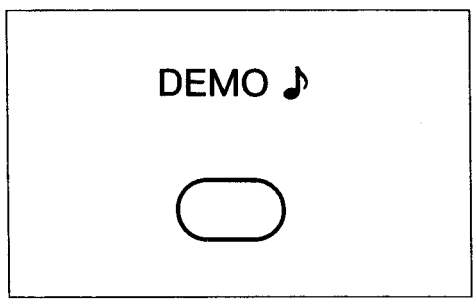
KN200



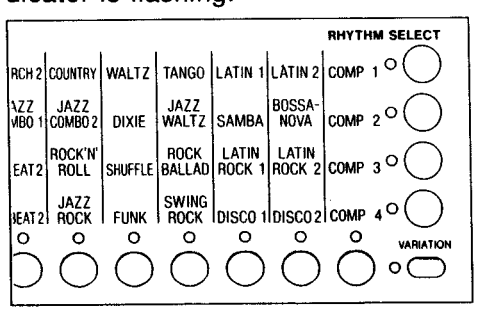
KN400



1 Press the **DEMO ♪** button.



2 In the **RHYTHM SELECT** or **SOUND SELECT** sections , select a row across by pressing one of the vertical row buttons. Select the demonstration performance you want to hear by pressing any horizontal row button whose indicator is flashing.



(KN400)

- The demonstration tune is played.
- If you want to stop the performance in the middle of tune, press a button whose indicator is flashing.
- To listen to another demonstrated function, press a button whose indicator is flashing.

3 When you are finished listening to the demonstration tunes, press the **DEMO ♪** button again.

Continuous performance

If the **START/STOP** button is pressed after step 1, the demonstration tunes will be played continuously, and then they will be repeated.

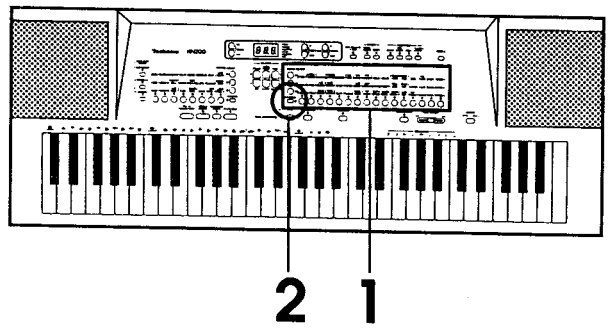
- During the continuous performance, if you press a button whose indicator is flashing, the next tune will be played.
- Pressing the **START/STOP** button again will stop the continuous performance.

The other buttons and keys do not function while the demonstration performance is played.

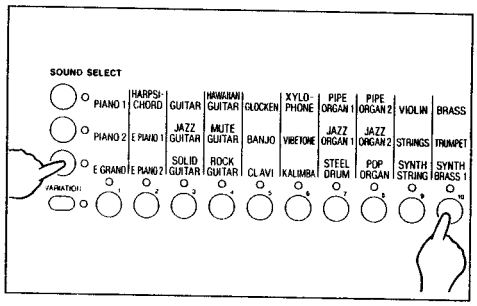
Selecting sounds

You can easily select any of 48 different sounds, just by pressing the corresponding buttons. In addition, the variation sound available for each preset sound doubles your expressive power.

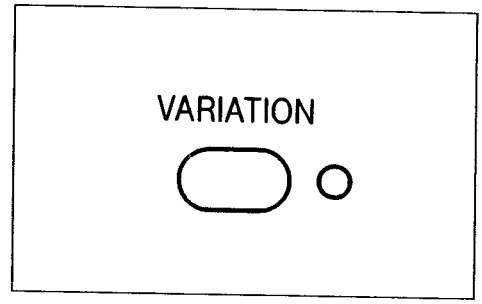
Using the Sound Select KN200



1 Select the sound by pressing the corresponding **SOUND SELECT** buttons in the vertical and horizontal rows.

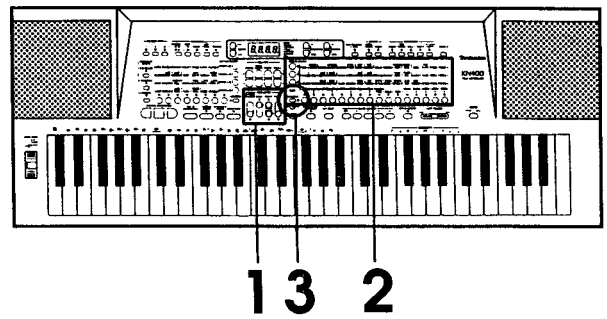


2 You can change the sound by pressing the **VARIATION** button to turn it on.

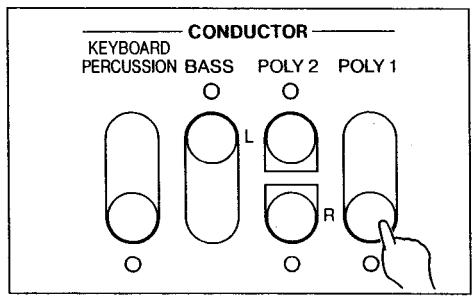


ENGLISH

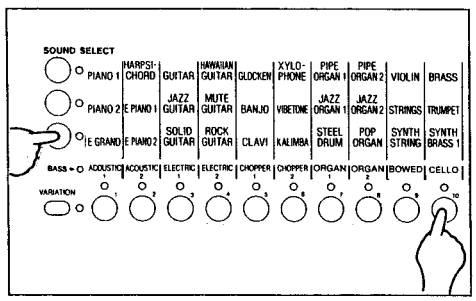
Using the Sound Select KN400



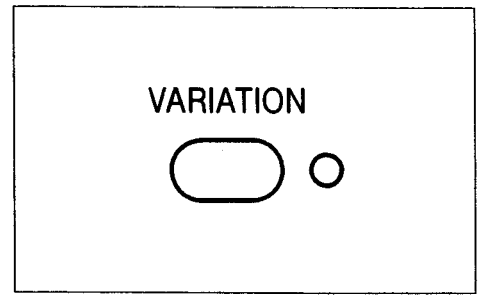
1 In the **CONDUCTOR** section, find the **POLY 1** button and press it to turn it on.



2 Select the sound by pressing the corresponding **SOUND SELECT** buttons in the vertical and horizontal rows.



3 You can change the sound by pressing the **VARIATION** button to turn it on.

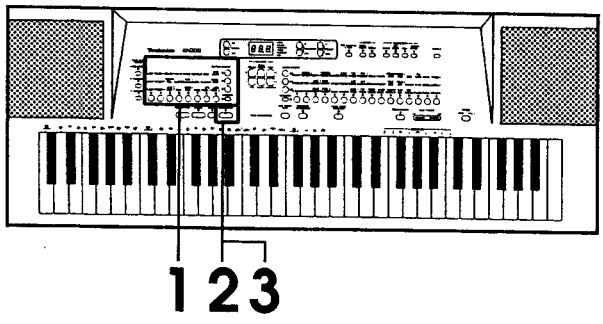


- You can mix two different sounds and play them on the entire keyboard, or you can "split" the keyboard into left and right parts and assign a different sound to each part. (Refer to Vol. 2, page 4.)

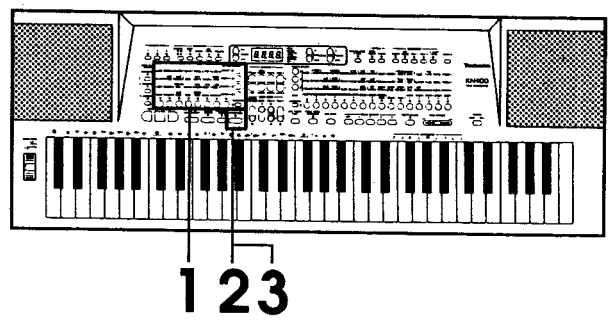
Playing automatic rhythms

Listen to a preset rhythm.

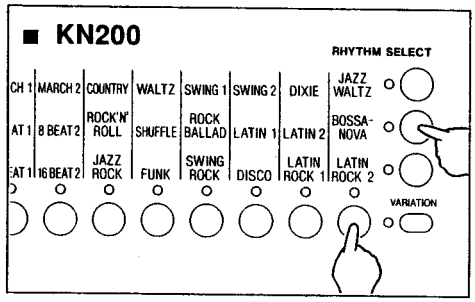
KN200

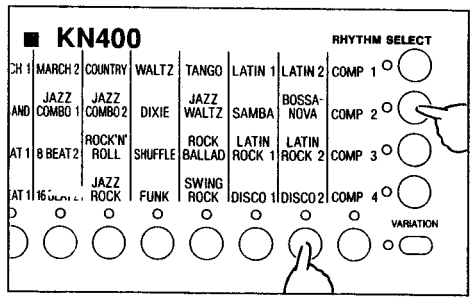


KN400

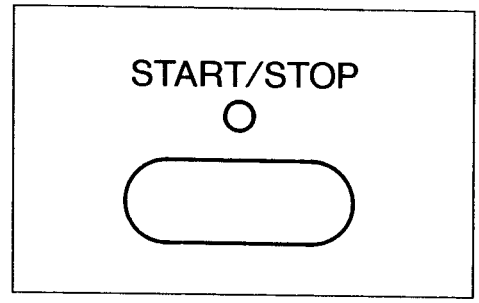


1 In the **RHYTHM SELECT** matrix, use the buttons in the horizontal and vertical rows to select a rhythm (for example, the **BOSSA NOVA** rhythm).


■ KN200
RHYTHM SELECT
CH 1 MARCH 2 COUNTRY WALTZ SWING 1 SWING 2 DIXIE JAZZ WALTZ
AT 1 8 BEAT 2 ROCK'N' ROLL SHUFFLE ROCK BALLAD LATIN 1 LATIN 2 BOSSA-NOVA
EAT 1 16 BEAT 2 JAZZ ROCK FUNK SWING ROCK DISCO LATIN ROCK 1 LATIN ROCK 2
VARIATION


■ KN400
RHYTHM SELECT
CH 1 MARCH 2 COUNTRY WALTZ TANGO LATIN 1 LATIN 2 COMP 1
AND JAZZ COMBO 1 JAZZ COMBO 2 DIXIE JAZZ WALTZ SAMBA BOSSA-NOVA COMP 2
AT 1 8 BEAT 2 ROCK'N' ROLL SHUFFLE ROCK BALLAD LATIN ROCK 1 LATIN ROCK 2 COMP 3
JAZZ ROCK FUNK SWING ROCK DISCO 1 DISCO 2 COMP 4
VARIATION

2 Start the rhythm by pressing the **START/STOP** button.

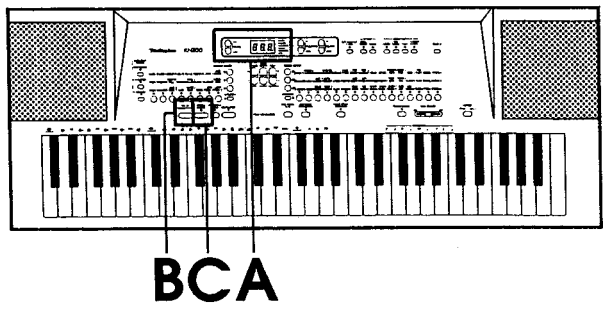


3 Stop the rhythm by pressing the **START/STOP** button again.

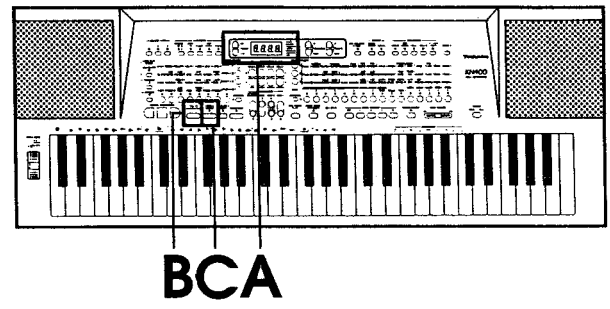
ENGLISH

Control the rhythm.

KN200

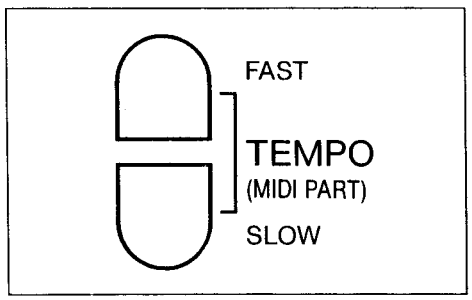


KN400



Adjust the tempo.

A Adjust the tempo with the **SLOW** and **FAST** buttons for **TEMPO**.



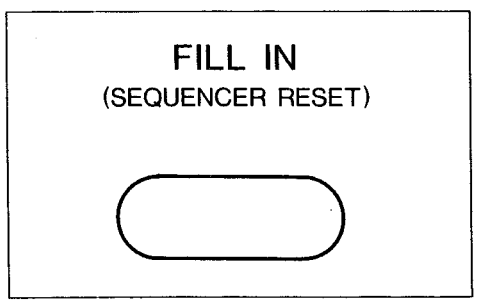
The tempo you set is shown on the display.

- **KN200**

- **KN400**

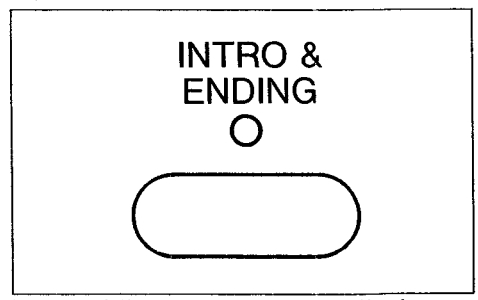
Insert a fill-in pattern.

B While the preset rhythm pattern is being played, press the **FILL IN** button.



Insert an intro/ending pattern.

C Before starting the rhythm, press the **INTRO & ENDING** button to turn it on. You will hear an intro pattern play before the regular preset rhythm starts.



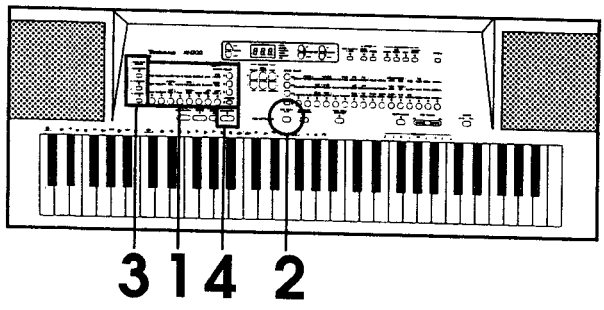
Now, while the rhythm is still playing, press the **INTRO & ENDING** button. You will hear an ending pattern, and then the rhythm stops.

Automatic accompaniment

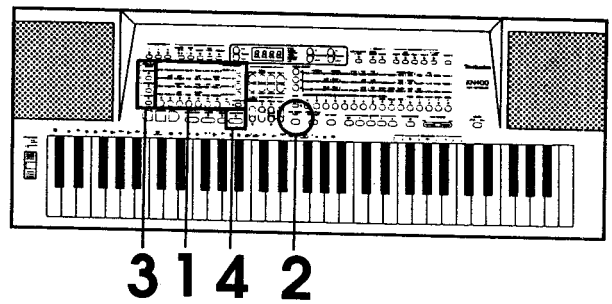
Simply by playing a chord on the keyboard, the **AUTO PLAY CHORD** function automatically plays an accompaniment pattern which matches the selected rhythm.

Use the AUTO PLAY CHORD

KN200



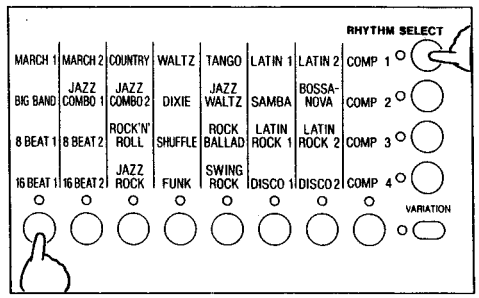
KN400



■ Use the **AUTO PLAY CHORD** with the following tune.

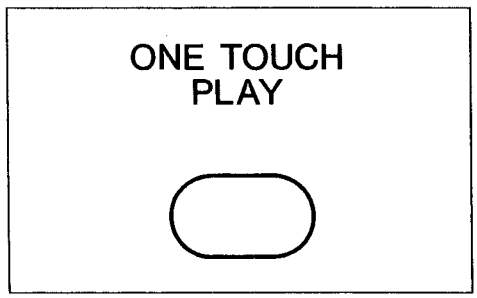
She Wore A Yellow Ribbon

1 Use the buttons in the **RHYTHM SELECT** matrix to select the **MARCH 1** rhythm.

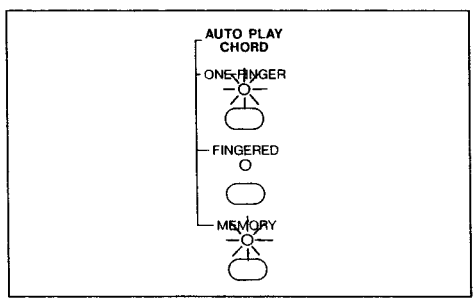


(KN400)

2 Press the **ONE TOUCH PLAY** button until the panel settings change.



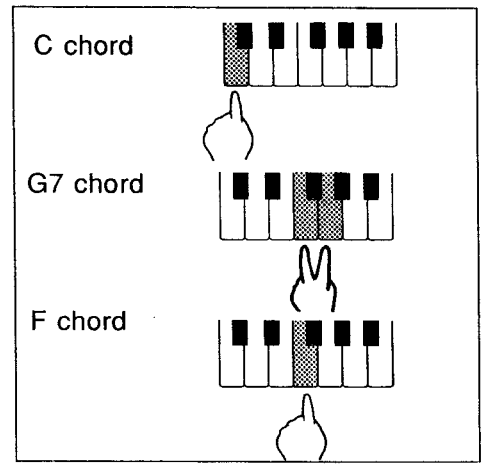
3 In the **AUTO PLAY CHORD** section, press the **ONE-FINGER** button to turn it on.



4 Use your left hand to play the chords and your right hand to play the melody.

- The automatic accompaniment starts to play.

Where C, G7 and F are indicated in the musical score, press the corresponding keys as shown here.

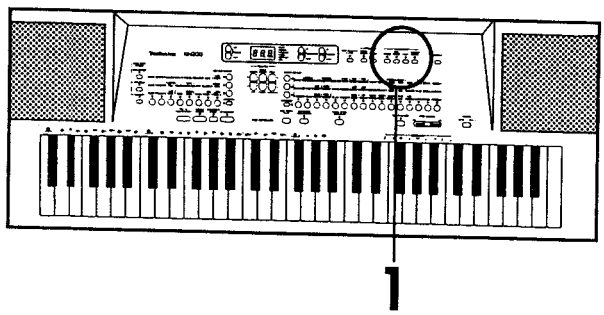


Storing a chord progression

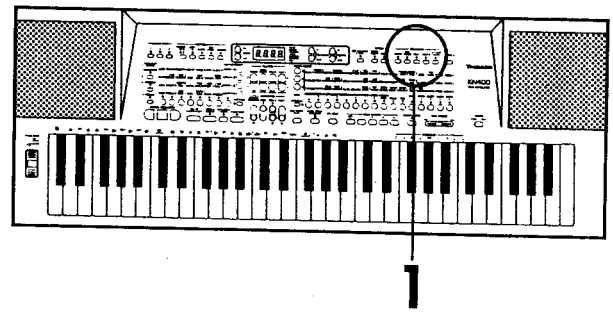
Before playing a tune on the keyboard, you can store its chord progression in the keyboard's internal **SEQUENCER** memory. Then you can concentrate on playing the melody while the chord progression is played back in an automatic accompaniment pattern.

Storing a chord progression in the Sequencer

KN200



KN400

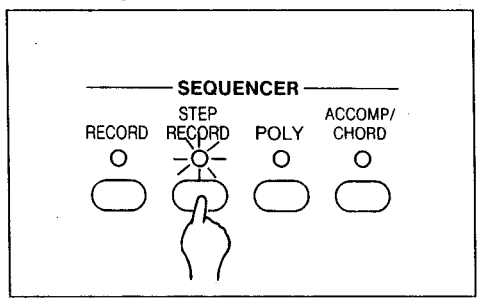


■ Store the chords in the following example.

Little Brown Jug

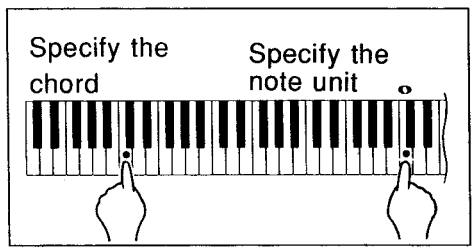
Sound KN200.....**POLY: TROMBONE**
KN400.....**POLY 1: TROMBONE**
Rhythm.....**DIXIE**
AUTO PLAY CHORD .....**ONE-FINGER** ON

1 Press the **STEP RECORD** button of the **SEQUENCER** section. Its indicator lights.



- The **ACCOMP/CHORD** indicator flashes.

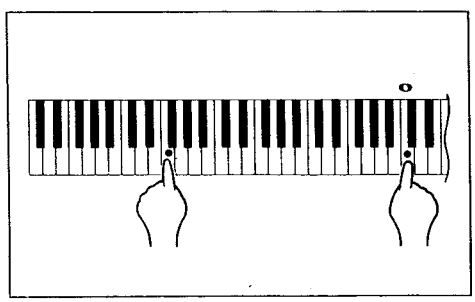
2 Store one measure of a C chord.



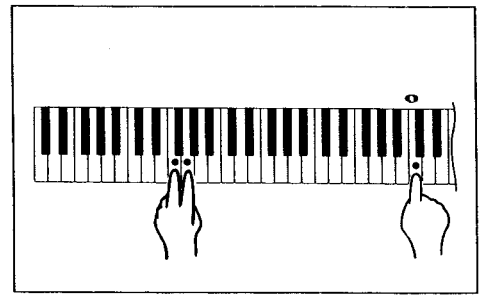
While holding down a C chord on the left part of the keyboard, press the o key to specify a whole note (one measure of C chord).

- A "beep" will sound to indicate that the chord has been stored.

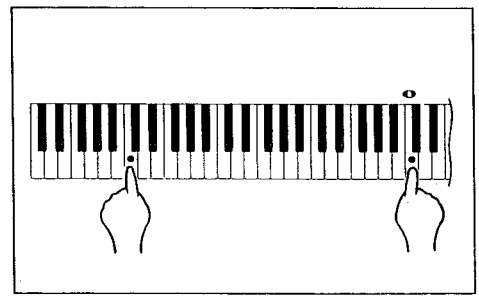
3 While holding down an F chord, press the o key.



4 While holding down a G7 chord, press the o key.

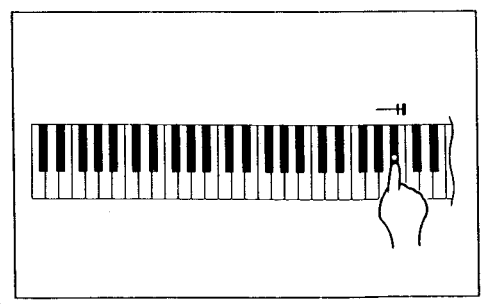


5 While holding down a C chord, press the o key.



6 Repeat steps 2~5 three more times to store the entire chord progression.

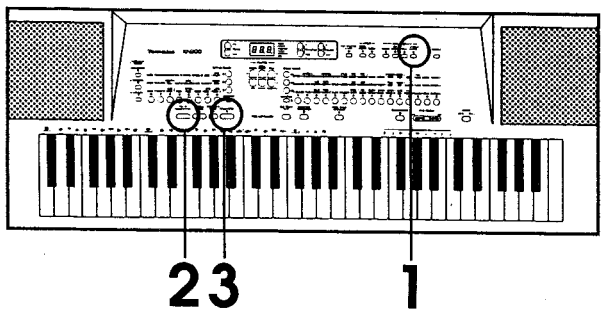
7 Press the —H key.



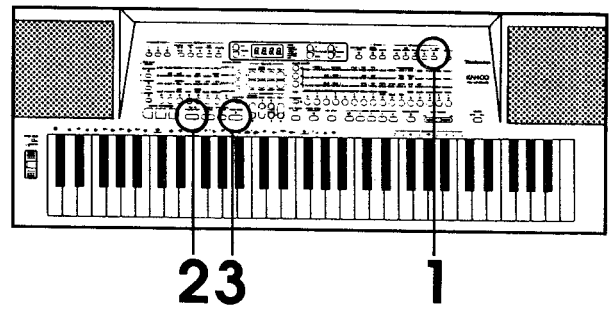
- The **STEP RECORD** indicator turns off and the **ACCOMP/ CHORD** indicator lights.

Playing back the chord progression

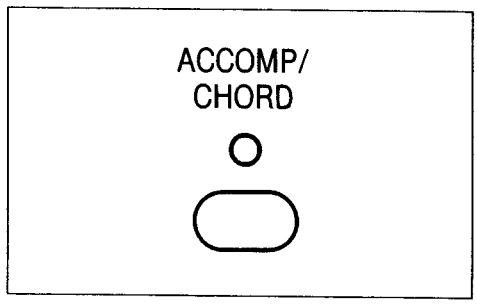
KN200



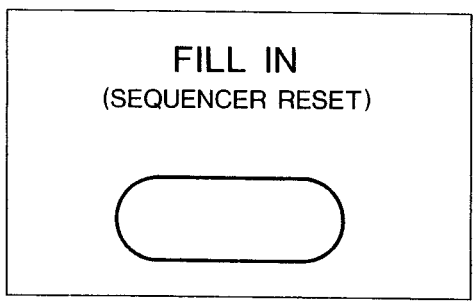
KN400



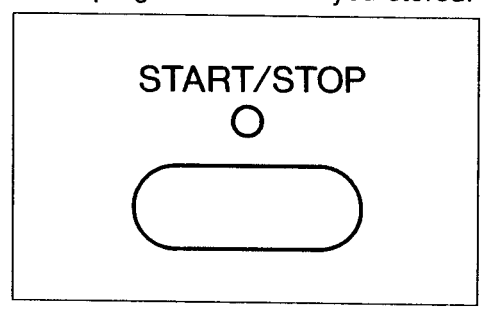
1 Confirm that the **ACCOMP/CHORD** button is on.



2 Press the **SEQUENCER RESET** button.



3 Press the **START/STOP** button. The automatic accompaniment pattern is played back following the chord progression which you stored.



Note for KN200:
If the power is turned off, the stored memory is erased.

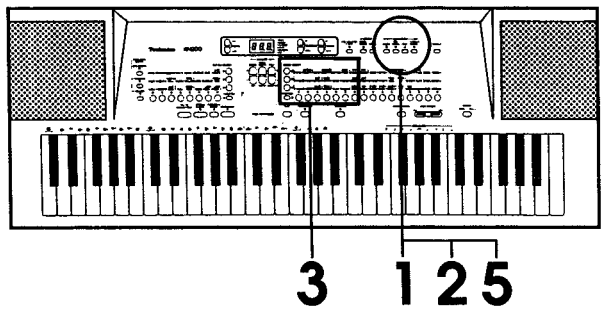
ENGLISH

Storing a performance

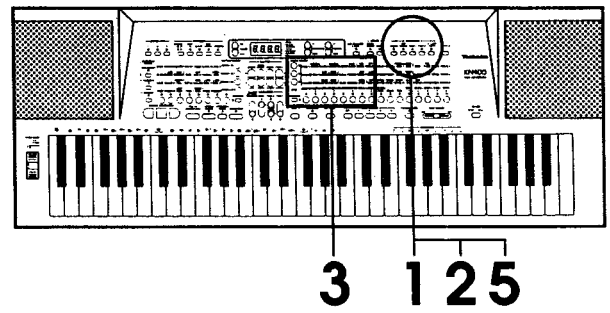
The **SEQUENCER** is a special feature that allows you to record your keyboard performance and have it played back automatically just as you performed it.

Storing your performance in the Sequencer

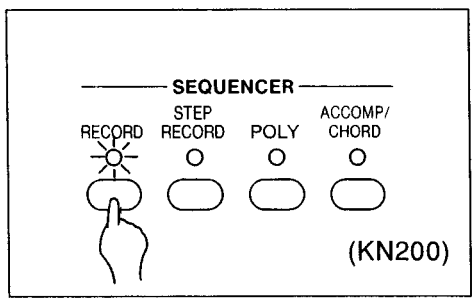
KN200



KN400

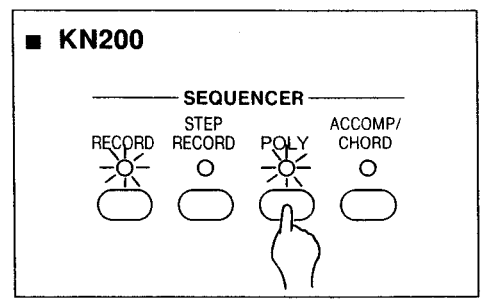


1 In the **SEQUENCER** section, press the **RECORD** button to turn it on.

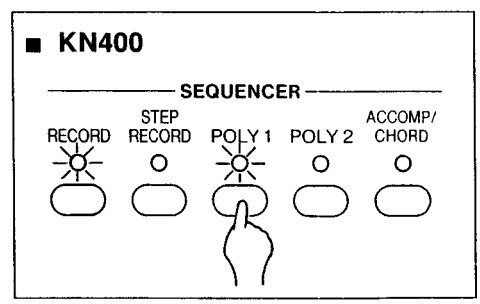


2 In the **SEQUENCER** section, press the **POLY** (KN200) or **POLY 1** (KN400) button to turn it on.

■ **KN200**

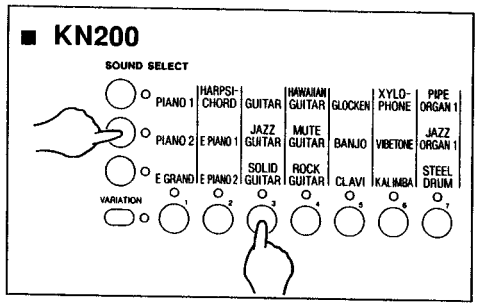


■ **KN400**

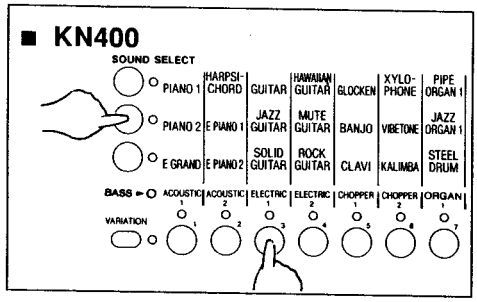


3 In the **SOUND SELECT** matrix, select a sound (for example, the **JAZZ GUITAR**).

■ **KN200**



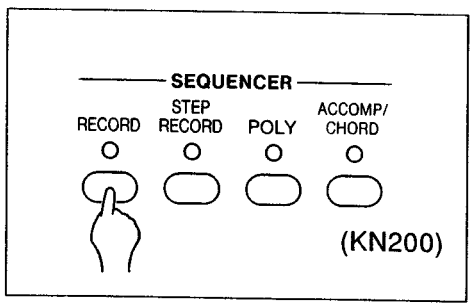
■ **KN400**



4 Play the melody on the keyboard.

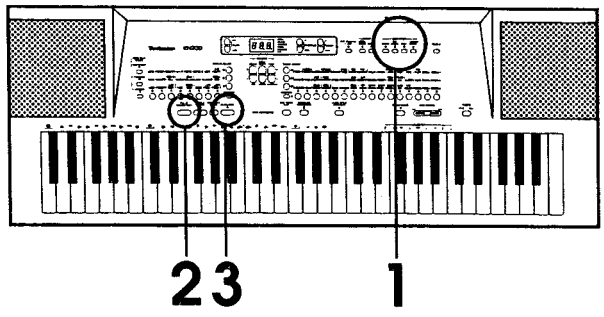
- Actual recording begins when you press a key on the keyboard or the **START/STOP** button to start the rhythm.

5 At the end of the tune, press the **RECORD** button in the **SEQUENCER** section again to turn it off.

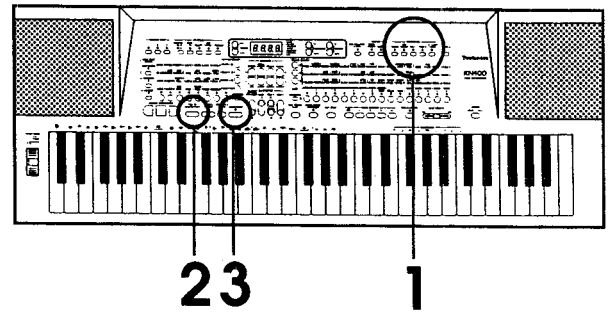


Playing back your performance

KN200



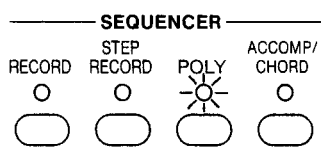
KN400



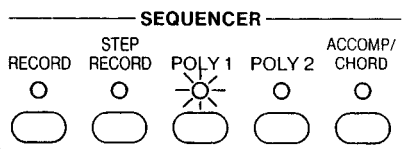
1 In the **SEQUENCER** section, check that the indicator for the **POLY** (KN200) or **POLY 1** (KN400) button is lit.

- If the indicator is not lit, press the button to turn it on.

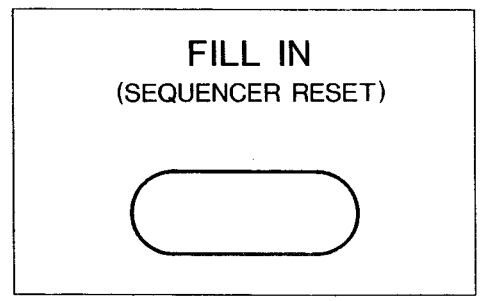
■ **KN200**



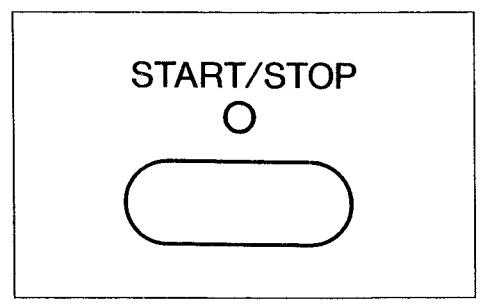
■ **KN400**



2 Press the **SEQUENCER RESET** button.



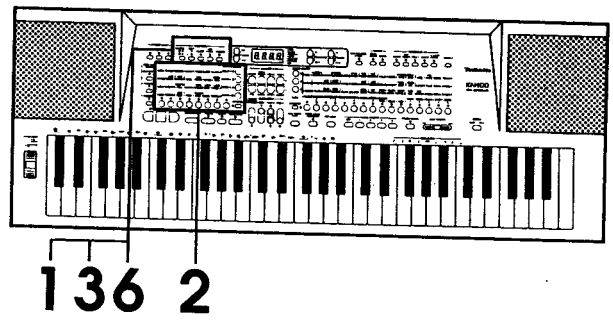
3 Press the **START/STOP** button. Your performance is played back just as you recorded it.



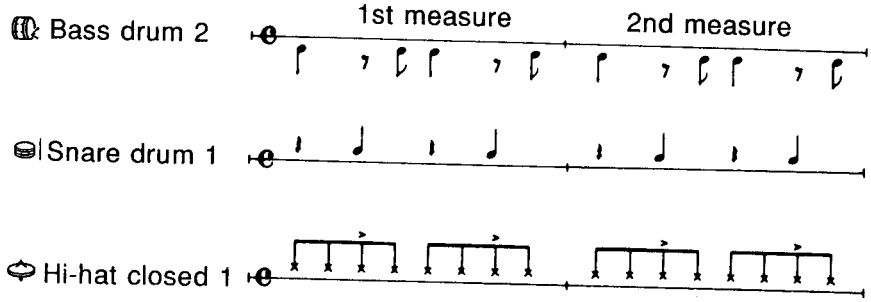
Creating a rhythm pattern (KN400)

The **COMPOSER** is the special function by which you create and store your original accompaniment pattern. Just like the **AUTO PLAY CHORD**, the **COMPOSER** can play back your original rhythm in the chords you specify on the keyboard.

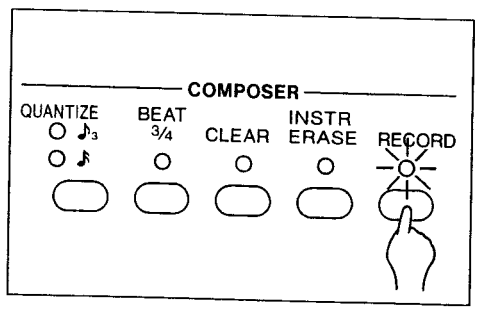
Storing a rhythm pattern in the Composer



Store the following rhythm.

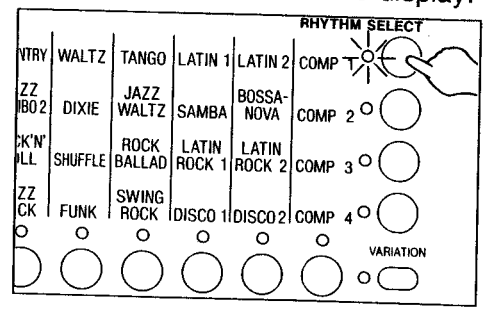


1 In the **COMPOSER** section, press the **RECORD** button to turn it on.



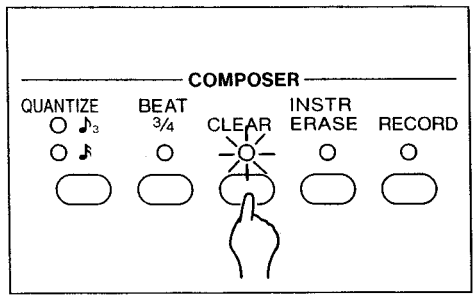
2 In the **RHYTHM SELECT** matrix, press the **COMP 1** button.

- Its indicator lights.
- " A L L " is shown on the display.



ENGLISH

3 In the **COMPOSER** section, press the **CLEAR** button.



4 In the **COMPOSER** section, press the **RECORD** button once.

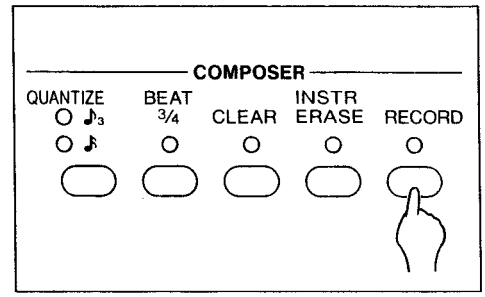
- " d r " (drum) is shown on the display.
- The sound of the metronome begins. This completes the preparation for storing in the **COMPOSER**.
- Adjust the tempo to the desired speed with the **TEMPO** buttons.

5 Play the rhythm pattern on the keyboard.

1) Find the key on the keyboard that has the bass drum 2 mark ($_2$) printed above it. Use this key to store two measures of the bass drum pattern in time with the metronome.
2) Then, in the same manner, use the snare drum 1 key ($_1$) to store two measures of the snare drum pattern.
3) Finally, use the hi-hat closed 1 key ($_1$) to store two measures of the hi-hat pattern.

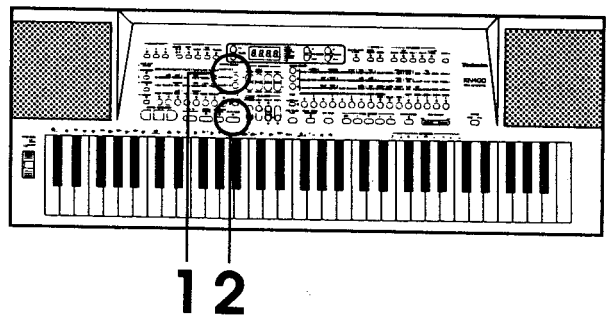
- The 2-measure pattern is repeatedly played back while you are recording.

6 In the **COMPOSER** section, press the **RECORD** button 5 times to turn it off.

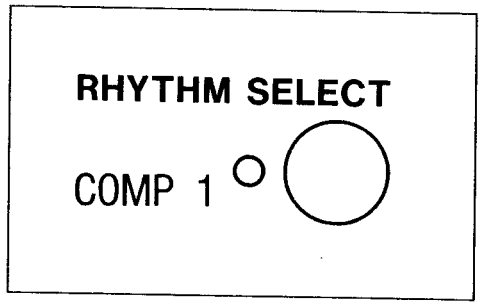


- In addition to rhythm patterns, you can also record chord and melody patterns and bass patterns. (Refer to Vol. 3, page 14.)

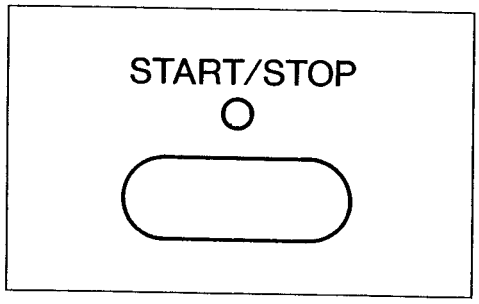
Playing back the rhythm pattern



1 In the **RHYTHM SELECT** section, confirm that the **COMP 1** indicator is lit.



2 Press the **START/STOP** button. Playback of your original accompaniment pattern starts or stops each time the **START/STOP** button is pressed.



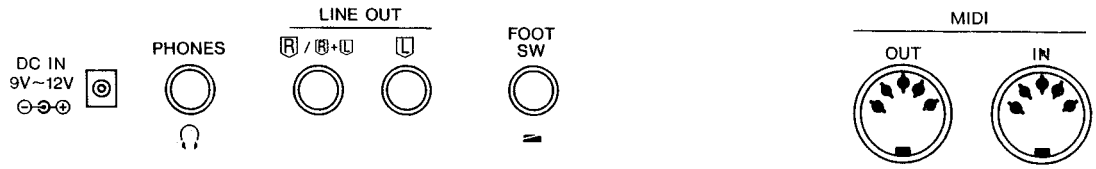
ENGLISH

Options and connections

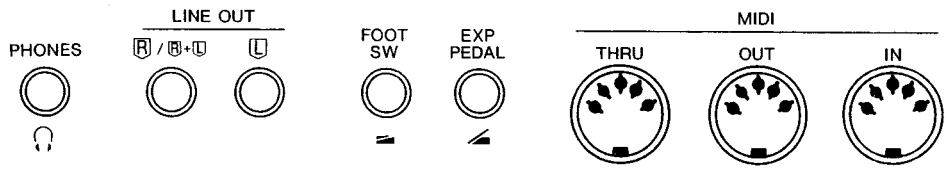
This page shows the optional accessories that are available for your Technics Keyboard. These can make your instrument more versatile and fun to play than it already is.

Also indicated are the many possible connections to the rear accessory panel.

KN200



KN400



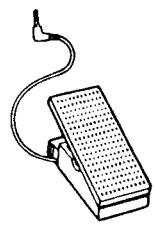
EXP PEDAL (KN400)
The SZ-E2 Expression Pedal allows you to control the volume (loudness) of all the keyboard sounds, leaving your hands free to play.

FOOT SW
When an SZ-P1 Foot Switch is connected to this terminal, you can choose from among several functions to control by foot. (Refer to Vol. 3, page 24.)

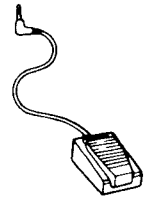
LINE OUT (output level 1.5V 600Ω)
By plugging into a high-power amplifier, the sound can be reproduced at high volume. (Use the **R/R+L** terminal when outputting monaural sound.)

PHONES (∩)
For silent practice headphones may be used. When plugged in, the speaker system is automatically switched off, and sound is heard only through the headphones.

DC IN 9V~12V (KN200)
Connect the exclusive AC adaptor to this terminal.



SZ-E2
Expression Pedal
(optional)



SZ-P1
Foot Switch
(optional)

Cautions for safest use of this unit

Installation location

1. **A well-ventilated place.**
   Take care not to use this unit in a place where it will not receive sufficient ventilation, and not to permit the ventilation holes to be covered by curtains, or any similar materials.
2. **Place away from direct sunlight and excessive heat from heating equipment.**
3. **A place where humidity, vibration and dust are minimized.**

Power source

■ **KN200**

1. **For the power source, use ONLY the included AC adaptor (SY-AD1). Use of a different AC adaptor may result in malfunction or even damage to the equipment.**
2. **If the unit is not to be used for some time, remove the AC adaptor from the wall socket.**

■ **KN400**

1. **Be sure the line voltage selector is in accordance with local voltage in your area before connecting the plug to the socket.**
2. **DC power cannot be used.**

Handling the power cord

1. **Never touch the power cord, or its plug, with wet hands.**
2. **Don't pull the power cord.**

Metal items inside the unit may result in electric shock or damage.

Do not permit metal articles to get inside the unit.
Be especially careful with regard to this point if children are near this unit. They should be warned never to try to put anything inside.
If, nevertheless, some such article does get inside, disconnect the power cord plug from the electrical outlet, and contact the store where the unit was purchased.

If water gets into the unit

Disconnect the power cord plug from the electrical outlet, and contact the store where it was purchased. As a precaution, it is suggested that flower vases and other containers which hold liquids not be placed on the top of this unit.

If operation seems abnormal

Immediately turn off the instrument, disconnect the power cord plug from the electrical outlet, and contact the store where it was purchased.
Discontinue using the unit at once. Failure to do so may result in additional damage or some other unexpected damage or accident.

A word about the power cord

If the power cord is scarred, is partially cut or broken, or has a bad contact, it may cause a fire or serious electrical shock if used. NEVER use a damaged power cord for any appliance. Moreover, the power cord should never be forcibly bent.

Don't touch the inside parts of this unit.

Some places inside this unit have high voltage potential. Never try to remove the top or back panels of this unit, or to touch inside parts by hand or with tools.
Contact someone who is qualified in order to inspect the inside, or to replace a fuse, if such becomes necessary. Never attempt to do these things yourself.

Maintenance

The following suggestions will assist you in keeping the unit in top condition.

- Be sure to switch the instrument off after use, and do not switch the unit on and off in quick succession, as this places an undue load on the electronic components.
- To keep the luster of the surface and buttons, simply use a clean, damp cloth; polish with a soft, dry cloth. Polish may be used but do not use thinners or petro-chemical-based polishes.
- A wax-based polish may be used on the cabinet, although you will find that rubbing with a soft cloth will suffice.

SERVICE MUST BE CARRIED OUT BY DEALER OR OTHER QUALIFIED PERSON.

Symptoms which appear to be signs of trouble

The following changes in performance may occur in the Technics Keyboard but do not indicate trouble:

Phenomenon	Remedy
■ Sounds and effects	
The buttons, keys, etc. malfunction.	■ **KN200** • Turn off the **PLAY** button once, then turn it on again. All settings return to their factory-preset (initialized) status. ■ **KN400** • Turn off the **POWER** button once. Then, while pressing all three **MANUAL PERCUSSION** buttons, press the **POWER** button to turn it on. All settings return to their factory-preset (initialized) status.
No sound is produced when the keys are pressed.	• The **MAIN VOLUME** is at the minimum setting. Adjust the volume with the **MAIN VOLUME** control. • The **DEMO** ♪ button is on, and – – – (KN200) or – – – – (KN400) is shown on the display. Press the **DEMO** ♪ button to turn it off. The display returns to the tempo display. (Refer to Vol. 1, page 10.) • The **BALANCE** volumes are set to 0. **KN200**: Press the **POLY** (+) button in the **BALANCE** section to adjust the volume. (Refer to Vol. 2, page 5.) **KN400**: Press the + buttons for **POLY 1**, **POLY 2** and **BASS & ACCOMP** to adjust the volumes. (Refer to Vol. 2, page 5.) • The local control for a part performed on the keyboard is set to off. Set the local control to on. (Refer to Vol. 3, page 32.)
When many keys are pressed at the same time, not all of them sound.	• Up to 11 notes can be produced simultaneously. The number of notes which can be produced simultaneously may decrease depending on the selected sound, the **DIGITAL CELESTE** status, the **ACCOMP PART** status (KN400), etc.
When the **DIGITAL CELESTE** is on and you change the sound, the **DIGITAL CELESTE** turns off.	• KN400: The **DIGITAL CELESTE** effect does not function for **DUAL**, **DUET** and **TRIO** mode sounds. (Refer to the Reference Guide.)
CONDUCTOR, **AUTO PLAY CHORD** and **PANEL MEMORY** do not work.	• The MIDI receive mode is set to the multi mode. Set the receive mode to the single mode. (Refer to Vol. 3, page 32.)
The highest note of the **SOLID GUITAR** sound is strange.	• This is not a malfunction. When the **SOLID GUITAR** sound (**VARIATION** on) is assigned to the **POLY** part (KN200) or **POLY 1** or **2** part (KN400), or when the **SPECIAL 6** sound is assigned to the **ACCOMP PART**, the highest played note for that part becomes a cutting sound.

■ RHYTHM

The rhythm does not sound.	• The **BALANCE** volumes are set to 0. Press the **DRUMS** (+) button to adjust the volume. (Refer to Vol. 2, page 5.) • KN400: In the **RHYTHM SELECT** section, a **COMP** button with no stored performance was selected. Change the rhythm or store a new rhythm pattern in the **COMPOSER**. (Refer to Vol. 3, page 14.) • The MIDI clock is set to the external clock. Set the MIDI clock to the internal clock. (Refer to Vol. 3, page 33.)
The only rhythm produced is a hi-hat and bass drum sound.	• This is the rhythm sound produced when the **KEYBOARD PERCUSSION** button is on. When the **KEYBOARD PERCUSSION** button is turned off, the rhythm returns to normal.

■ AUTO PLAY CHORD

Some parts do not sound.	• Parts whose volumes are set to 0 with the **BALANCE** buttons or **SUB BALANCE/MIDI** button do not sound. Adjust the volume for each part with the respective **BALANCE** button or the **SUB BALANCE/MIDI** button. (Refer to Vol. 2, page 5.) • KN400: An **ACCOMP** part does not sound if its corresponding **ACCOMP PART 1**, **2** or **3** button is off. Press the desired **ACCOMP PART 1**, **2** and **3** buttons to turn them on. (Refer to Vol. 2, page 14.) • When the **KEYBOARD PERCUSSION** is played on the keyboard, the **ACCOMP** and **BASS** patterns do not sound. Turn off the **KEYBOARD PERCUSSION** button.

■ SEQUENCER

An error "beep" sounds when you attempt to record in the **SEQUENCER**.	• The remaining storage capacity of the **SEQUENCER** memory is 0.
Multi-track recording does not work.	• The playback track has been selected but the **START/STOP** button has not been pressed. A flashing track indicator shows the track which is ready for recording, and a lit track indicator shows a track which is ready for playback. To record one track while listening to another (playback) track, press the **START/STOP** button to begin playback. (Refer to Vol. 3, page 6.) • KN400: The part you wish to record is not turned on in the **CONDUCTOR** section. To record the **POLY 1** and **POLY 2** tracks simultaneously, turn on both the **POLY 1** and **POLY 2** buttons in the **CONDUCTOR**. (Refer to Vol. 3, page 7.)
KN400: The **POLY 1** and **ACCOMP/CHORD** buttons in the **SEQUENCER** are on, and no sound is produced when the keys are pressed.	• If **POLY 2** is turned on in the **CONDUCTOR** section when the **POLY 1** and **ACCOMP/CHORD** buttons in the **SEQUENCER** are on, the **FINGERED** or **ONE-FINGER** button in the **AUTO PLAY CHORD** is on, and the **ACCOMP PART 2** and **3** buttons are on, then no sound is produced when the keys are pressed.

ENGLISH

■ COMPOSER (KN400)

Storage is not possible.	• The remaining storage capacity of the **COMPOSER** memory is 0. Erase a **COMP 1~4** button in the **RHYTHM SELECT** section in which a pattern is stored. (Refer to Vol. 3, page 14.)
The stored rhythm pattern and the original pattern it was copied from are different.	• A two-measure pattern can be stored in the **COMPOSER**. Some of the rhythm and **AUTO PALY CHORD** patterns are four-measure patterns. When you copy a four-measure pattern, only two measures of the pattern are copied.
When editing a preset rhythm, the drums sound is not erased even when the **INSTR ERASE** button is pressed.	• Some of the drums sounds of preset rhythm patterns cannot be erased. Follow the **CLEAR** procedure. (Refer to Vol. 3, page 16.)

■ Other

Noise from a radio or TV can be heard.	• This sometimes occurs when electrical equipment such as a radio or TV is used near the Keyboard. Try moving such electrical equipment further away from the Keyboard. • The sound may be coming from a nearby broadcast station or amateur radio station. If the sound is bothersome, consult your dealer or servicenter.
The cabinet becomes warm during use.	• This keyboard has a built-in power source that heats the cabinet to some degree. This is not an indication of trouble.

Index

A

Accessories 1-26
ACCOMP ..... 2-14~17
ACCOMP PART (KN400) 2-14, 17
ACCOMP/CHORD ..... 1-18~19, 3-8~10
Adjusting the volume 2-16
AUTO PLAY CHORD ..... 1-15, 2-5, 14~16

B

BALANCE 2-5
Basic operating guide 1-6
BASS & ACCOMP, volume 2-16
BASS (KN400) ..... 2-3~4, 15~16
Beat 2-10
Beep sound 1-18, 3-9, 11, 31
Before you play 1-6
Block chords, TECHNI-CHORD 2-18
Break function 2-17

C

Cautions for safest use 1-27
Chords ..... 2-14~15
Chord progression 1-17, 19
COMP (KN400) 1-23, 25, 2-9, 19, 3-14
COMPOSER (KN400) ..... 1-23~24, 3-14~22
- ACCOMP 1, storing 3-18
- ACCOMP 2/ACCOMP 3, storing the 3-19
- ACCOMP PART 3-21
- Accompaniment pattern, create 3-15
- BASS 3-17
- BEAT ..... 3-14~15
- CLEAR ..... 3-14~18, 20
- COMP ..... 3-14~15, 20~21
- DRUMS 3-16, 21
- Editing a preset rhythm pattern 3-20
- Factory-preset rhythms 3-20
- INSTR ERASE 3-14, 16
- MANUAL PERCUSSION 3-16
- Metronome 3-16
- Number button 3-15
- Outline of storing 3-22
- Parts 3-14
- Playback 3-21
- Preset rhythm pattern, editing a 3-20
- QUANTIZE ..... 3-14~19
- RECORD ..... 3-14~20
- Setting up 3-15
- SOUND SELECT ..... 3-17~18
- 3/4 time 3-15
- Triplet-type patterns 3-19

CONDUCTOR (KN400) 1-9, 2-3
Connections 1-26

D

DC IN 9V~12V (KN200) 1-26
DEMO 1-10
Demonstration performance 1-10
DIGITAL CELESTE 2-6
DOWN button, transpose 2-7
DRUMS, balance 2-10, 12

E

Effect 2-6
End key 1-18, 3-6
Ending 1-14, 2-11
EXP PEDAL (KN400) 1-26
Expanded Mode, PANEL MEMORY (KN400) 3-23

F

Factory-preset status 3-26
FAST, TEMPO 1-14, 3-25
FILL IN 1-14, 2-11, 19, 3-10
FINGERED ..... 2-14~15, 17~18
Fingered mode ..... 2-14~15
First-beat indicator 2-10
FOOT SW 1-26
Foot switch 3-24
Functions, setting the 3-23
- initializing 3-26

G

Glide effect 3-24

H

Headphone ..... 1-8~9, 1-26

I

Initialized settings ..... 1-6~7, 3-26
Initializing the functions 3-26
INTRO & ENDING 1-14, 2-11

K

KEY SPLIT (KN400) 2-5, 10
Keyboard Percussion 2-12

L

LINE OUT 1-26

ENGLISH

M

MAIN VOLUME ..... 1-8~9
Maintenance 1-27
MANUAL PERCUSSION (KN400) 1-7, 2-13, 3-16, 26
MEMORY 2-15
Metronome (KN400) 1-24, 3-14
MIDI ..... 3-27~34
- All-note-off 3-33
- APC mode, Transmit mode 3-33
- Automatic performance 3-27
- Basic channel 3-29, 31
- Beep sounds 3-31
- Chord mode, Transmit mode 3-33
- Common functions 3-32
- Connections 3-29
- CONTROL part 3-31
- Data, transmitted/received 3-28
- Default settings 3-29
- Exit MIDI mode 3-34
- External clock 3-33
- IN 3-27
- Implementation chart 3-138
- Internal clock 3-33
- Local control 3-32
- MAIN VOLUME 3-31
- Maximum number of notes 3-32
- MIDI cable 3-27
- MIDI clock 3-33
- MIDI function-setting mode, enter the 3-31
- MIDI terminals 3-27
- Multi mode, Recive mode 3-32
- Normal, Program change mode 3-33
- NOTE ONLY 3-33
- OUT 3-27, 32
- PANEL MEMORY program change (KN400) 3-33
- Program change mode 3-33
- Receive mode 3-32
- RHYTHM SELECT 3-32, 34
- Sequencer 3-27, 29
- Setting functions 3-30
- Single mode, Receive mode 3-32, 31
- Sound generator 3-32
- START/STOP 3-34
- SUB BALANCE/MIDI button 3-31, 34
- Synchronized performance 3-27
- Technics, Program change mode 3-33
- THRU 3-27
- Transmit mode 3-33

Minor chord, one-finger 2-14
Minor seventh chord, one-finger 2-14
- button, balance 2-5
MODULATION (KN400) 2-7, 3-25
Music stand 1-6, 7
MUSIC STYLE ARRANGER 2-19

N

Names and functions 1-4
Note keys 3-8
Number buttons, panel memory (KN400) 2-8
Number of notes 2-12, 15, 17, 3-13

O

ONE TOUCH PLAY 2-19
ONE-FINGER ..... 1-16, 2-14~15, 17~18
Options 1-26

P

PANEL MEMORY (KN400) 2-8, 3-23, 33
Percussive instrument 2-12
PHONES 1-26
Pitch 3-23
PITCH BEND wheel (KN400) 2-6
PLAY (KN200) 1-6, 3-12
Playback, rhythm pattern (KN400) 1-25
Playing the keyboard ..... 1-8~9
+ button, balance 2-5
POLY (KN200) ..... 2-5, 3-24~25
POLY (KN400) ..... 1-9, 2-5~6, 14~15, 3-25
POWER (KN400) 1-7, 3-12, 26
Power source 1-27
Preset rhythm patterns 2-9

R

Rear panel 1-26
RECORD, Composer (KN400) ..... 1-23~24
- Sequencer ..... 1-20~21
Rhythm pattern ..... 1-23~24
RHYTHM SELECT ..... 1-13~14, 25, 2-9, 11, 3-23, 33~34
Rhythm variation 2-9
Root note 2-14

S

Selecting sounds ..... 1-11~12
SEQUENCER ..... 1-17~18, 20, 22, 3-3~13, 26
- ACCOMP/CHORD ..... 3-8~10
- Automatic repeat 3-8
- Beep sound 3-9, 11
- Chord progression, storing 3-8
- Clearing 3-12
- Drums-only intro 3-10
- End key ..... 3-8~9
- Example of storing 3-11
- FILL IN 3-10
- INTRO & ENDING 3-10

Multi-track storage 3-5
Note unit keys ..... 3-8~11
Number of notes 3-7, 13
PANEL MEMORY 3-11
Panel settings, storing the beginning 3-10
Parts, clearing 3-12
Playing back 3-6
Real-time 3-3
RECORD ..... 3-5, 7~8, 12
Redo 3-9
Repeat key ..... 3-8~9
Reset key ..... 3-8~9
Rhythm change, storing a 3-10
SEQUENCER RESET 3-6, 10
Sound changes, storing 3-11
STEP RECORD ..... 3-3, 8~10
Storage capacity 3-7
3-beat rhythm, storing a 3-11
Two or more parts, storing 3-7
What you can store 3-3
SEQUENCER RESET 1-19, 3-6, 10
SET button, panel memory (KN400) 2-8
Setting the functions 3-23
Setting up ..... 1-6~7
Seventh chord, one-finger 2-14
SLOW, TEMPO ..... 1-14, 3-24~25
SOUND SELECT 2-3
Specifications 1-130
Split (KN400) ..... 1-7, 2-4~5, 9~10, 14
START/STOP ... 1-10, 13, 19, 22, 25, 2-9, 11, 14~15, 3-34
STEP RECORD 1-18
SUB BALANCE/MIDI ..... 2-16, 3-23~25
SUSTAIN 2-6
SY-AD1 (KN200) 1-6
SYNCHRO & BREAK 2-10, 17, 19
Synchro-start 2-10
SZ-E2 Expression Pedal 1-26
SZ-P1 Foot Switch 1-26, 3-24

T

TECHNI-CHORD 2-18
TEMPO 1-14, 24, 2-10
Touch Response (KN400) 1-9
TRANSPOSE 2-7
Trouble shooting 1-28
Tuning 3-23

U

UP, transpose 2-7

V

VARIATION ..... 1-11~12, 2-9, 15, 3-32
Vibrato (KN400) 2-7
Vibrato depth 3-25
Voltage selector 1-27
Volume ..... 2-5, 12~13, 16

W

Walking bass (KN400) 2-15

ENGLISH

Specifications

		SX-KN200	SX-KN400
KEYBOARD		61 KEYS	61 KEYS (TOUCH RESPONSE)
SOUND GENERATOR		PCM	
MAXIMAL NOTE NUMBER PRODUCING SIMULTANEOUSLY		11 NOTES	
SOUND	POLY (KN200) POLY 1, 2, ACCOMP (KN400)	PIANO 1, 2, ELECTRIC GRAND PIANO, HARPSICHORD, ELECTRIC PIANO 1, 2, GUITAR, JAZZ GUITAR, SOLID GUITAR, HAWAIIAN GUITAR, MUTE GUITAR, ROCK GUITAR, GLOCKEN, BANJO, CLAVI, XYLOPHONE, VIBETONE, KALIMBA, PIPE ORGAN 1, 2, JAZZ ORGAN 1, 2, STEEL DRUM, POP ORGAN, VIOLIN, STRINGS, SYNTH STRING, BRASS, TRUMPET, SYNTH BRASS 1, 2, FRENCH HORN, TROMBONE, ACCORDION, TENOR SAX, ALTO SAX, OBOE, CLARINET, HARMONICA, PAN FLUTE, FLUTE, WHISTLE, SPEICAL 1, 2, 3, 4, 5, 6 (WITH VARIATION FOR EACH SOUND)	
	BASS	—	ACOUSTIC 1, 2, ELECTRIC 1, 2, CHOPPER 1, 2, ORGAN 1, 2, BOWED BASS, CELLO, TUBA, SYNTH 1, 2, 3, 4, 5
EFFECT	DIGITAL CELESTE	○ (POLY)	○ (POLY 1, 2)
	SUSTAIN	○ (POLY, ACCOMP 1, 2 & 3, BASS)	○ (POLY 1, 2, ACCOMP 1, 2, 3, BASS)
	MODULATION	—	VIBRATO ON, OFF
	PITCH BEND	—	○ (PITCH BEND WHEEL)
TRANSPOSE		○	
TECHNI-CHORD		○	
RHYTHM		MARCH 1, 2, COUNTRY, WALTZ, SWING 1, 2, DIXIE, JAZZ WALTZ, 8 BEAT 1, 2, ROCK'N'ROLL, SHUFFLE, ROCK BALLAD, LATIN 1, 2, BOSSA NOVA, 16 BEAT 1, 2, JAZZ ROCK, FUNK, SWING ROCK, DISCO, LATIN ROCK 1, 2 (WITH VARIATION FOR EACH RHYTHM)	MARCH 1, 2, COUNTRY, WALTZ, TANGO, LATIN 1, 2, BIG BAND, JAZZ COMBO 1, 2, DIXIE, JAZZ WALTZ, SAMBA, BOSSA NOVA, 8 BEAT 1, 2, ROCK'N'ROLL, SHUFFLE, ROCK BALLAD, LATIN ROCK 1, 2, 16 BEAT 1, 2, JAZZ ROCK, FUNK, SWING ROCK, DISCO 1, 2 (WITH VARIATION FOR EACH RHYTHM)
	CONTROL	START/STOP, SYNCHRO & BREAK, FILL IN, INTRO & ENDING, TEMPO	
	MANUAL PERCUSSION	—	○
	KEYBOARD PERCUSSION	34 KEYS	
AUTO PLAY CHORD		ONE-FINGER, FINGERED, MEMORY	
ACCOMP PART		—	1, 2, 3
ONE TOUCH PLAY		○	
PANEL MEMORY		—	SET, 1~4
SEQUENCER		2 TRACKS (PART: POLY, ACCOMP/CHORD) STRAGE CAPACITY: APPROX. 1600 NOTES INPUT MODE: REAL TIME, STEP (ACCOMP/CHORD ONLY)	3 TRACKS (PART: POLY 1, 2, ACCOMP/CHORD) STRAGE CAPACITY: APPROX. 1600 NOTES INPUT MODE: REAL TIME, STEP (ACCOMP/CHORD ONLY)
COMPOSER		—	5 TRACKS (PART: DRUMS, BASS, ACCOMP 1, 2, 3) STRAGE CAPACITY: APPROX. 600 NOTES INPUT MODE: REAL TIME EDIT FUNCTION: CLEAR, INSTR ERASE, QUANTIZE, BEAT
DISPLAY		○	
DEMO		○	
CONTROL		BALANCE, SUB BALANCE/MIDI	BALANCE, SUB BALANCE/MIDI, CONDUCTOR (POLY 1, 2, BASS, KEYBOARD PERCUSSION)
MIDI		PART (POLY, BASS, ACCOMP 1, 2, 3, DRUMS, CONTROL), BASIC CHANNEL (1~16), RECEIVE MODE, TRANSMIT MODE, LOCAL CONTROL, PROGRAM CHANGE, NOTE ONLY, MIDI CLOCK, START/STOP	PART (POLY 1, 2, BASS, ACCOMP 1, 2, 3, DRUMS, CONTROL), BASIC CHANNEL (1~16), RECEIVE MODE, TRANSMIT MODE, LOCAL CONTROL, PROGRAM CHANGE, PANEL MEMORY PROGRAM CHANGE, NOTE ONLY, MIDI CLOCK, START/STOP
TERMINALS		HEADPHONE TERMINAL, LINE OUT (R/R+L), MIDI TERMINAL (IN, OUT), FOOT SWITCH	HEADPHONE TERMINAL, LINE OUT (R/R+L, L), MIDI TERMINAL (IN, OUT, THRU), FOOT SWITCH, EXPRESSION PEDAL
OTHERS		PLAY SWITCH, MAIN VOLUME	POWER SWITCH, MAIN VOLUME
OUTPUT		2.5W×2	5.5W×2
SPEAKERS		12cm×2	12cm×2
POWER REQUIREMENT		9~12 V DC (WITH EXCLUSIVE AC ADAPTOR SY-AD1)	35W, 23W (NORTH AMERICA) AC120/220/240V 50/60Hz, AC120V 60Hz (NORTH AMERICA AND MEXICO)
DIMENSIONS (W×H×D)		95.1 cm×14.7 cm×36.6 cm (37-7/16"×5-25/32"×14-13/32")	
NET WEIGHT		8.0 kg (17.6 lbs)	8.9 kg (19.6 lbs)
ACCESSORIES		MUSIC STAND, AC ADAPTOR	MUSIC STAND, AC CORD

Technics

KEYBOARD

SX-KN200
SX-KN400
SX-KN220
SX-KN440

Vol. 2

ENGLISH FRANÇAIS ESPAÑOL 中文

QQTG0034A

VOL. 2

PRACTICAL APPLICATIONS

This volume comprises a detailed explanation of sound, effect and rhythm.
Read the part which are relevant to the functions you wish to use.

APPLICATIONS PRATIQUES

Ce tome comprend les explications détaillées sur son, effet et rythme.
Lisez les articles concernant les fonctions que vous souhaitez utiliser.

APLICACIONES PRACTICAS

Este tomo consta de una explicación detallada del sonido, efecto y ritmo.
Lea las partes relacionadas a las funciones que desea utilizar.

應用篇

在VoL. 2 對於音色、效果、節奏加以詳細的說明。
請按所需翻閱，以便善於應用這種功能。

Contents

Part I Sounds and effects 3

Selecting sounds: KN200 3

Selecting sounds: KN400 3

Balance 5

Effect 6

Pitch Bend (KN400) 6

Modulation (KN400) 7

Transpose 7

Panel Memory (KN400) 8

Part II Playing the rhythm 9

Rhythm Select 9

Keyboard Percussion 12

Manual Percussion (KN400) 13

Auto Play Chord 14

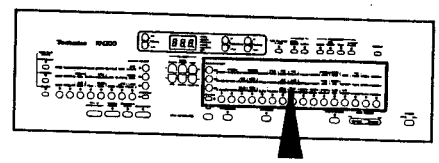
Techni-chord 18

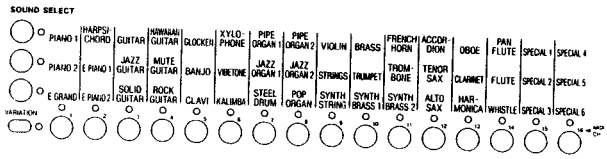
One Touch Play 19

Music Style Arranger 19

Selecting sounds: KN200

The keyboard sounds are selected from the 48 sounds shown in the **SOUND SELECT** matrix. Select a sound by pressing one vertical row button and one horizontal row button.

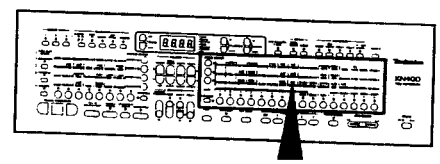




- Press the **VARIATION** button on to change the nuance of the selected sound. (Refer to the Reference Guide.)
- Up to 11 notes can be produced simultaneously. The number of notes which can be produced simultaneously may decrease depending on the selected sound.

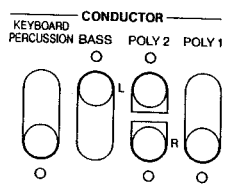
Selecting sounds: KN400

The keyboard sounds are comprised of three parts—**POLY 1**, **POLY 2** and **BASS**—for each of which respective sounds are selected with the **SOUND SELECT** matrix. These parts are centrally controlled by the **CONDUCTOR**, which allows you to assign the same sound to the entire keyboard or different sounds to the left and right sections of a split keyboard.



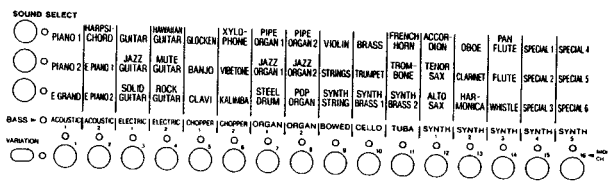
Select a sound for each part.

1. Select a part.
   Press the **CONDUCTOR** button for the part you wish to select a sound for first. Select **POLY 1**, **POLY 2** or **BASS**.
   - To select the **POLY 2** part, press the **R** (lower) button.



   - If the **KEYBOARD PERCUSSION** button is pressed on, the keyboard keys produce the sounds of percussion instruments. (Refer to page 12.)

2. Select a sound.
   POLY 1, **POLY 2**: The sound is selected by pressing one of the 3 vertical row buttons and one of the 16 horizontal row buttons in the **SOUND SELECT** matrix.



   BASS: The sound indicated in the **BASS** row is selected by pressing one of the 16 horizontal buttons in the **SOUND SELECT** matrix.

- Press the **VARIATION** button on to change the nuance of the selected **POLY** sound. (Refer to the Reference Guide.)

ENGLISH

3. Assign the part to the keyboard.
   Press the **CONDUCTOR** buttons to turn on the keyboard parts you wish to play. There are 8 possible ways to select parts as shown in the chart.

(R) denotes the right section of a split keyboard. (L) denotes the left section of a split keyboard.

CONDUCTOR settings	Parts which can be played on the keyboard	Number of notes that can be produced simultaneously (When the **AUTO PLAY CHORD** is off)
POLY 1	**POLY 1**	**POLY 1**: 11 notes
POLY 2 R	**POLY 2**	**POLY 2**: 11 notes
POLY 1 + POLY 2 R	**POLY 1 + POLY 2**	**POLY 1**: 7 notes **POLY 2**: 4 notes
POLY 1 + POLY 2 L	(L) **POLY 2** (R) **POLY 1** Split point	**POLY 1**: 7 notes **POLY 2**: 4 notes
BASS	**BASS**	**BASS**: 1 note
POLY 1 + BASS	(L) **BASS** (R) **POLY 1** Split point	(R) **POLY 1**: 11 notes (L) **BASS**: 1 note
POLY 2 R + BASS	(L) **BASS** (R) **POLY 2** Split point	(R) **POLY 2**: 11 notes (L) **BASS**: 1 note
POLY 1 + POLY 2 R + BASS	(L) **BASS** (R) **POLY 1 + POLY 2** Split point	(R) **POLY 1**: 7 notes **POLY 2**: 4 notes (L) **BASS**: 1 note

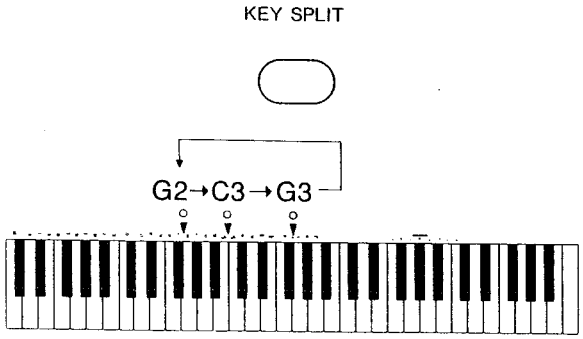
- Press 2 or more buttons simultaneously when multiple parts are used.
- The number of notes which can be produced simultaneously may decrease depending on the selected sound.

Poly 2 R and L

For **POLY 2** there are two types to select from, right (**R**) and left (**L**). **R** is selected to produce **POLY 2** sounds alone or both **POLY 1** and **POLY 2** sounds simultaneously over the entire undivided keyboard or on the right section of a divided keyboard. **L** is used to assign **POLY 2** sounds to the left section of a divided keyboard.

Changing the split point

The split point is shown by one of the indicators at G2, C3 and G3. With each press of the **KEY SPLIT** button, the indication moves to the next split point in the following order: G2 → C3 → G3.



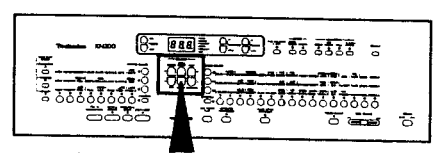
- When the **AUTO PLAY CHORD** is used, the keyboard will split automatically.
- Depending on the selected sound, the octave may shift when the keyboard is split.

Balance

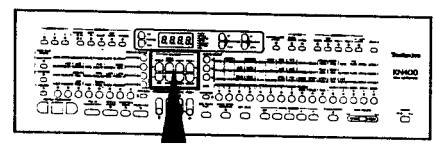
The volumes for the **DRUMS**, **BASS & ACCOMP** and **POLY** parts are adjusted with the respective **BALANCE** buttons.

- The volume will increase when a + button is pressed and decrease when a – button is pressed.
- Keep the button pressed to change the volume continuously.
- There are 10 volume levels. The volume level of each part is shown on the display (0~9).
- A few seconds after you use the **BALANCE** buttons, the display returns to the tempo display.
- No sound is produced for a part if its volume is set to 0.
- KN200: With the **POLY** button you can adjust the volume of the sound selected in the **SOUND SELECT** section.

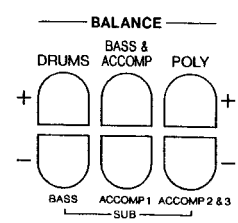
KN200



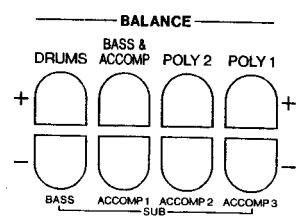
KN400



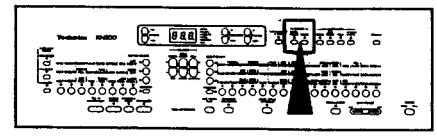
KN200



KN400

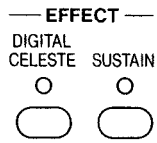


Effect



(KN200)

Your keyboard is provided with **DIGITAL CELESTE** and **SUSTAIN** effects. Try using these effects to see how they add character to the different sounds.



■ **DIGITAL CELESTE**

DIGITAL CELESTE gives the sound a thickness and diffusion as when a large number of musical instruments is being played.

- When this button is on, the number of notes which can be produced simultaneously is reduced.
- The **DIGITAL CELESTE** effect does not work for some sounds.
- KN400: The **DIGITAL CELESTE** effect does not function for the **BASS** part.

■ **SUSTAIN**

SUSTAIN is the gradual fading out of musical tones after the key is released.

How to set effects

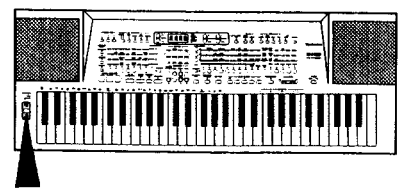
■ **KN200**

Press to turn on the respective buttons for the desired effects.

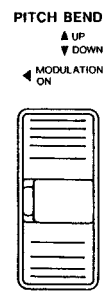
■ **KN400**

1. Turn on the **CONDUCTOR** button for the part for which you wish to set the effect. (Effects can be set for only one part at a time.)
   - To select the **POLY 2** part, press the **R** button.
2. Press to turn on the respective buttons for the desired effects.

Pitch Bend (KN400)



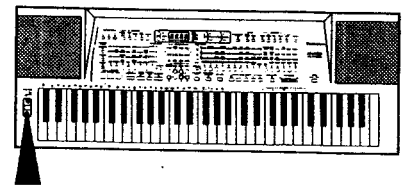
The pitch of the instrument can be continuously changed with the **PITCH BEND** wheel at the left end of the keyboard. Using this control, you can produce the effect of bending the strings on a guitar.



While pressing a key on the keyboard, move the wheel up and down to control the pitch.

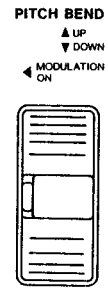
- When you release your hand from the wheel, it returns automatically to the center position and the pitch bend effect is turned off.
- The pitch can be raised or lowered as much as one whole note.
- The pitch bend effect does not function for the **AUTO PLAY CHORD** accompaniment pattern.

Modulation (KN400)

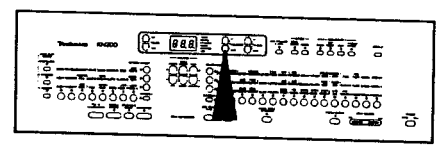


The **MODULATION** switch is located in the center of the **PITCH BEND** wheel. While the switch is pressed to the left, the vibrato effect is applied to the sounds. Vibrato is the effect of a slight waver in the pitch which can add a rich quality to the sounds.

- Release the switch to return to the normal sound.
- The vibrato depth can be set for each part independently. (Refer to Vol. 3, page 25.)



Transpose

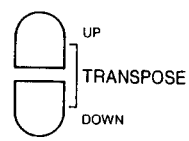


(KN200)

The **TRANSPOSE** control is used to shift the tuning (key) of the entire instrument in semitone steps across an entire octave.

Suppose you learn to play a song—in the key of C, for example—and decide you want to sing it, only to find it's either too high or too low for your voice. Your choice is to either learn the song all over again, in a different key, or to use the **TRANSPOSE** feature.

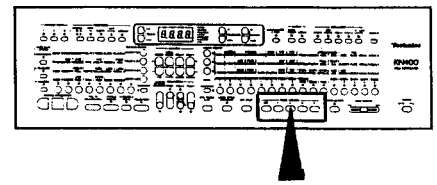
Each press of the **DOWN** button changes the key of the instrument as follows: B → B♭ → A → A♭ → G. Each press of the **UP** button changes the key as follows: D♭ → D → E♭ → E → F → F♯.



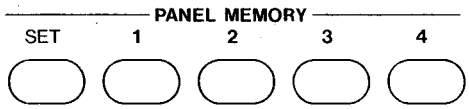
- When a **TRANSPOSE** button is pressed, pressing the C key will sound the note shown on the display.
- Pressing the two **TRANSPOSE** buttons at the same time will return the keyboard to the normal pitch.
- When transposed to a lower key, the sound of the lowest keyboard range may shift to the next higher octave.

ENGLISH

Panel Memory (KN400)



The **PANEL MEMORY** buttons **1~4** allow you to store up to four different panel settings of the keyboard. Then, simply by pressing just one button, the settings for the sounds and effects of each part are recalled instantly.



■ **Settings which can be stored are:**

- Sounds, effects and volumes for each part (**POLY 1**, **POLY 2**, **ACCOMP 1**, **2**, **3** and **BASS**)
- **CONDUCTOR** settings
- Keyboard split position
- **DIGITAL CELESTE** status
- **ACCOMP PART 1, 2, 3** status
- **TECHNI-CHORD** on/off status
- **AUTO PLAY CHORD** status

■ **Storing in the PANEL MEMORY**

1. Set up the desired panel settings.

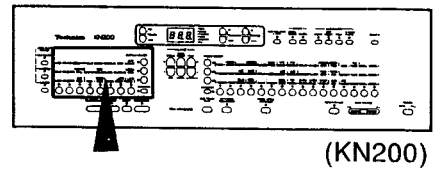
2. With the **SET** button held down, press one of the number buttons of the **PANEL MEMORY**.

- It is possible to expand the range of storable panel settings. (Refer to Vol. 3, page 23.)

Part II Playing the rhythm

The rhythm section enhances the capabilities of your keyboard with features such as automatic performance of the preset rhythm patterns and accompaniment patterns.

Rhythm Select


(KN200)

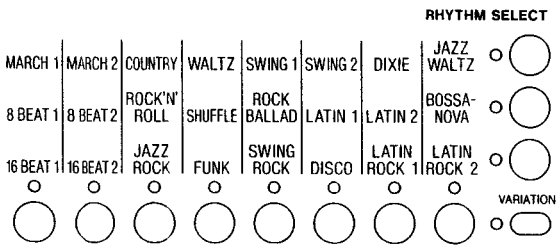
The rhythm section provides automatic performance of rhythm patterns using realistic percussive instrument sounds from a PCM digital sound generator.

Select a rhythm

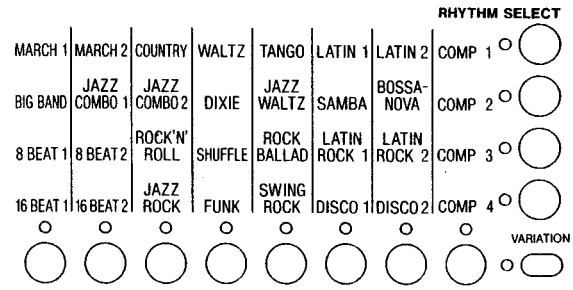
Press one of the vertical row buttons and one of the horizontal row buttons in the **RHYTHM SELECT** matrix for the desired rhythm.

- KN400: The **COMP 1~4** buttons are for storing your own original rhythm patterns. (Refer to Vol. 3, page 15.)
- When the **VARIATION** button is on, the rhythm pattern changes.

KN200



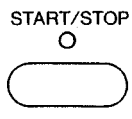
KN400



Start the rhythm

There are two ways to start the rhythm.

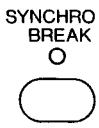
- Press the **START/STOP** button to start the rhythm instantly.



ENGLISH

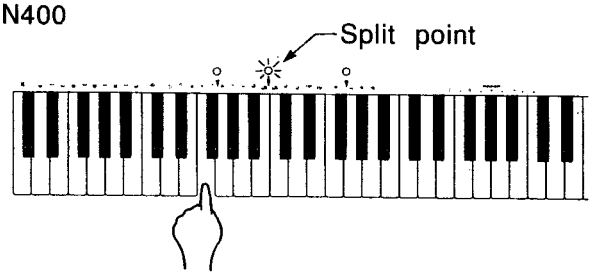
■ When the **SYNCHRO & BREAK** button is on, the rhythm is started by pressing any key to the left of the indicated keyboard split point.

1. Press the **SYNCHRO & BREAK** button to turn it on.

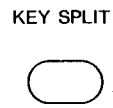


2. Press a key to the left of the keyboard split point. The rhythm starts to play.

KN400

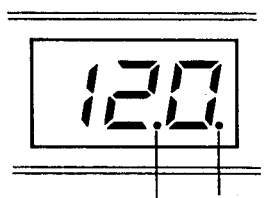


• KN400: Set the keyboard split point with the **KEY SPLIT** button. (Even when the keyboard is not divided into left and right sections, the indicator at the split position will light when the **KEY SPLIT** button is pressed.)



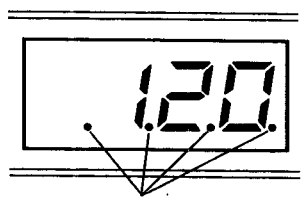
• When the rhythm is playing, the beat is shown by dots on the display.

KN200



Lights at the beginning of each measure — Lights for each beat

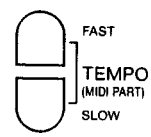
KN400



Respective indicator lights on the corresponding beat

• If the **SYNCHRO & BREAK** button is pressed on when the rhythm is stopped, the first-beat indicator flashes with each beat, indicating the synchro-start standby status.

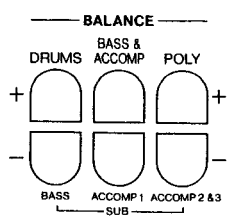
■ **TEMPO** adjusts how fast or slow the rhythm is played.



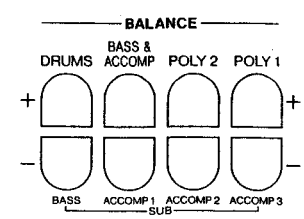
• Keep a button pressed to change the tempo continuously. When both buttons are pressed at the same time, the tempo is set at ♩=120.
• The tempo is shown on the display.

■ The **DRUMS** buttons in the **BALANCE** section allow you to adjust the loudness of the drums to be in perfect balance with the other sounds.

KN200

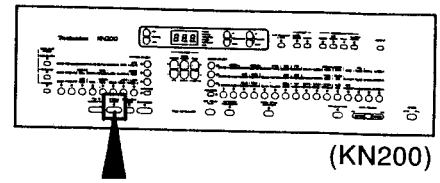


KN400



Intro & ending

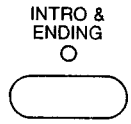
This feature lets you begin the rhythm with an introduction or stop the rhythm with an ending pattern.


(KN200)

■ This is how to start a song with INTRO.

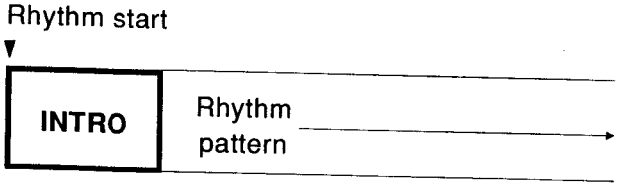
1. Select a rhythm on the **RHYTHM SELECT** matrix.

2. Press the **INTRO & ENDING** button to turn it on.



3. Press the **START/STOP** button to start the rhythm.

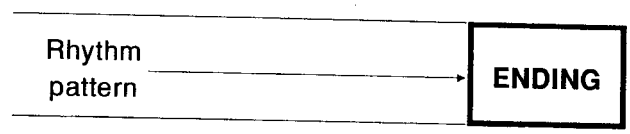
- When the intro is finished, the **INTRO & ENDING** indicator goes out.
- A rhythm with an intro can also be started with the synchro-start function.
- An intro pattern can also be inserted in the **AUTO PLAY CHORD**. (Refer to page 14.)



■ ENDING

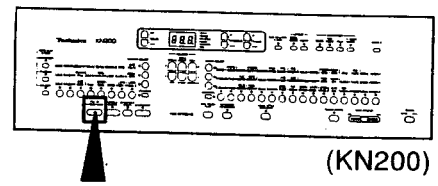
When the rhythm is on and the **INTRO & ENDING** button is pressed (at the end of a song for example), an ending pattern is produced, and then the rhythm stops.

- An ending pattern can also be inserted in the **AUTO PLAY CHORD**. (Refer to page 14.)
- If you accidentally press the **INTRO & ENDING** button in the middle of the tune, you can press the **FILL IN** button to continue the rhythm performance.



Fill In

Insert a fill-in pattern during the rhythm performance.

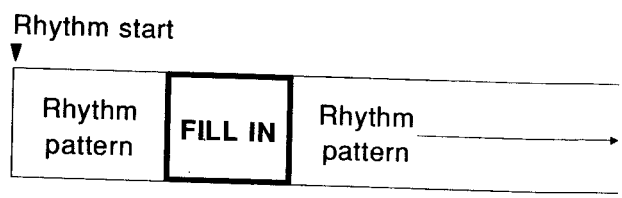

(KN200)

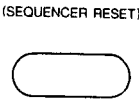
1. Select a rhythm on the **RHYTHM SELECT** matrix.

2. Start the rhythm.

3. Press the **FILL IN** button.

- When the **FILL IN** button is pressed, a fill-in pattern is heard immediately.
- A fill-in pattern can also be inserted in the **AUTO PLAY CHORD**. (Refer to page 14.)

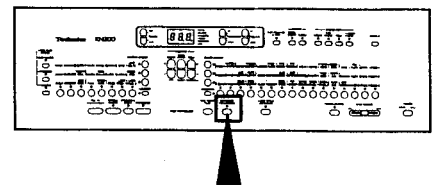




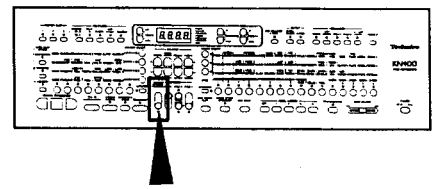
ENGLISH

Keyboard Percussion

KN200

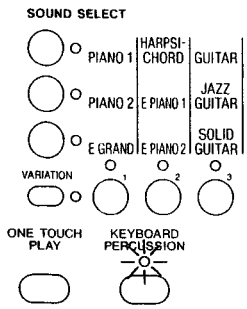


KN400

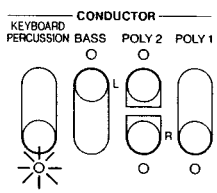


Press the **KEYBOARD PERCUSSION** button on to turn your keyboard into a whole band of percussive instruments and other special sounds.

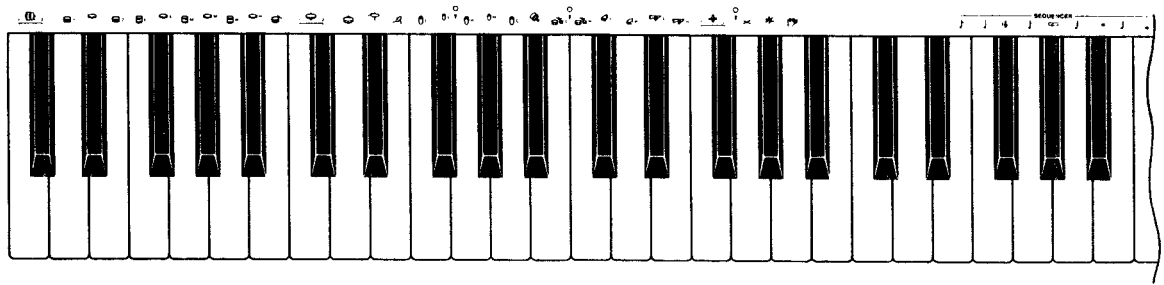
KN200



KN400

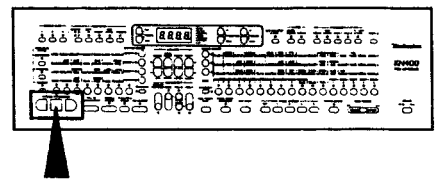


Percussive instrument sounds are produced by the keyboard keys as shown here. (For further explanation, refer to the Reference Guide.)

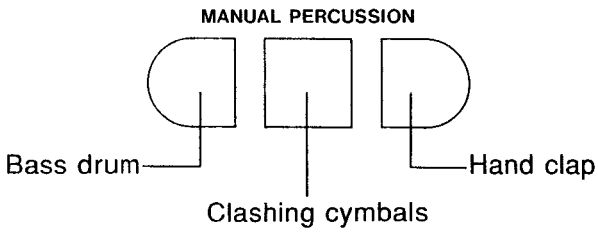


- The **KEYBOARD PERCUSSION** volume is adjusted with the **DRUMS BALANCE** adjustment. (Refer to page 5.)
- Up to four instruments can sound at the same time.
- When the **KEYBOARD PERCUSSION** button is on, the **POLY**, **BASS** and **ACCOMP** sounds are not available.
- If the **KEYBOARD PERCUSSION** is used while the automatic rhythm is playing, the rhythm pattern changes to a hi-hat and bass drum sound. To return to the normal rhythm sound, press the **KEYBOARD PERCUSSION** button to turn it off.
- KN400: The Touch Response feature also functions for the **KEYBOARD PERCUSSION** sounds.

Manual Percussion (KN400)



The sounds of percussive instruments are produced when the **MANUAL PERCUSSION** buttons are pressed.



A percussive sound from the **KEYBOARD PERCUSSION** can be stored in each of the **MANUAL PERCUSSION** buttons.

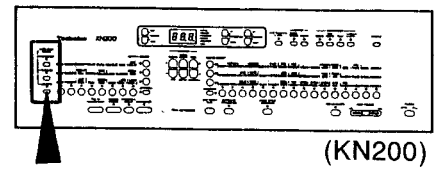
1. Press the **KEYBOARD PERCUSSION** button to turn it on.

2. While keeping one of the **MANUAL PERCUSSION** buttons pressed, select the desired percussive sound by pressing the appropriate key on the keyboard for about 2 seconds.
- When you hear the percussive sound of the pressed key, it means the sound has been stored in the **MANUAL PERCUSSION** button.

- Two more percussive sounds can be stored in the remaining two **MANUAL PERCUSSION** buttons.
- The **MANUAL PERCUSSION** button sounds can be played whether the **KEYBOARD PERCUSSION** button is on or off.
- The **MANUAL PERCUSSION** volume is adjusted with the **DRUMS BALANCE** adjustment. (Refer to page 5.)

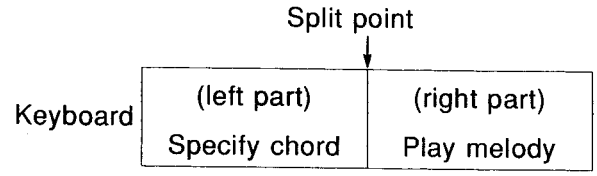
ENGLISH

Auto Play Chord


(KN200)

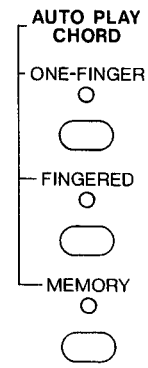
Simply by playing a chord on the keyboard, the **AUTO PLAY CHORD** function automatically plays an accompaniment pattern which matches the selected rhythm.

When an **AUTO PLAY CHORD** mode is selected, the keyboard automatically divides into left and right sections. The left keyboard is used to specify the chords, the right keyboard to play the melody.



Playing chords

Choose from two ways of playing chords—the one-finger mode and the fingered mode—with the **ONE-FINGER** and **FINGERED** buttons.

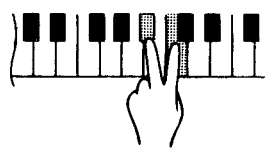
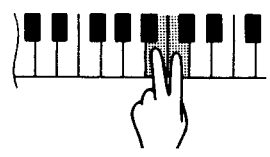
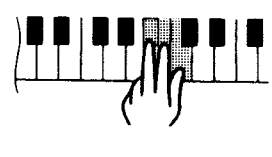


■ ONE-FINGER mode

In the one-finger mode, a chord is played by specifying its root note.

1. Press the **ONE-FINGER** button of the **AUTO PLAY CHORD** to turn it on.
2. KN400: Press the **ACCOMP PART** buttons to turn them on.
3. Select a rhythm with the buttons in the **RHYTHM SELECT** matrix.
4. Press the **START/STOP** button to start the rhythm playing.
5. Press a key on the left keyboard to specify the root note. The major chord (**ACCOMP** part) and bass note corresponding to this root note are automatically played in an accompaniment pattern.

Minor, seventh and minor seventh chords are also easily produced.

minor chord	seventh chord	minor seventh chord
Play the root note plus a black key to the left of it.	Play the root note plus a white key to the left of it.	Play the root note plus a black key and a white key to the left of it.
Example: Cm 	Example: C7 	Example: Cm7 

- KN400: In the **ONE-FINGER** mode, the **POLY 2 L** button and the **BASS** button of the **CONDUCTOR** turn off automatically and cannot be selected.

■ **FINGERED mode**

In the fingered mode, the chord is specified by playing it on the left part of the keyboard.

1. Press the **FINGERED** button of the **AUTO PLAY CHORD** to turn it on.

2. KN400: Press an **ACCOMP PART** button to turn it on.

3. Select a rhythm with the buttons in the **RHYTHM SELECT** matrix.
   - You may turn the **VARIATION** button on, if desired. The accompaniment pattern may change, depending on the selected rhythm variation.

4. Press the **START/STOP** button to start the rhythm playing.

5. When you play a chord on the left keyboard, the chord (**ACCOMP** part) and its corresponding bass note are automatically played in an accompaniment pattern.
   - KN400: When the **POLY 2 L** is selected, the **POLY 2** is also heard.
   - The keyboard can distinguish the following played chords for each key: C, C7, CM7, Caug, Cm, Cm7, Cdim7, $Cm7^{\flat 5}$, CmM7, C7sus4. If a chord other than these is played, the chord in this group which is most closely related is used.
   - When a chord is specified with the rhythm stopped, the specified **ACCOMP** and **BASS** sounds are produced, but no rhythm pattern is produced.

Notes:

- If the **FINGERED** or **ONE-FINGER** button of the **AUTO PLAY CHORD** is on, the number of sounds which are produced simultaneously by the right keyboard decreases.
  KN200: **POLY** .....4 notes
  KN400: **POLY 1**.....4 notes or
  POLY 2.....4 notes
- KN400: When the **ACCOMP PART 2** and/or **ACCOMP PART 3** button is on, **POLY 1** and **POLY 2** cannot be selected at the same time. (See "ACCOMP PART on/off" on page 17.)
- KN400: If **BASS** only was selected in the **CONDUCTOR** section, when the keyboard automatically splits the right keyboard produces **POLY 1** sounds.

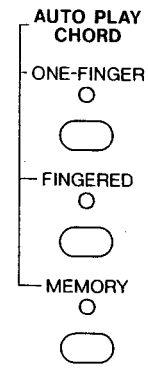
Memory button

When the ONE-FINGER or FINGERED button is on

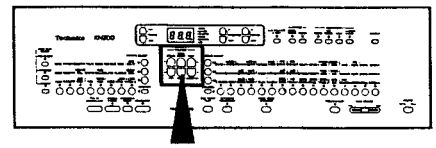
If the **MEMORY** button is on, even if you release the keyboard keys, the chord is memorized and is played repeatedly until you play another chord.

KN400: When the ONE-FINGER and FINGERED buttons are off

If the **POLY 2 L** button in the **CONDUCTOR** section is on and the rhythm is started when the **MEMORY** button is on, a walking bass matching the specified chord is produced.



Adjusting the volume



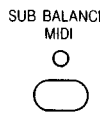
■ Total volume

Adjust the total accompaniment volume with the **BASS & ACCOMP** buttons in the **BALANCE** section.

■ Setting the volume of each part

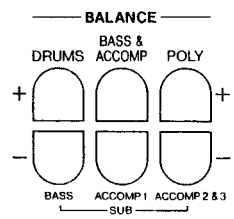
The accompaniment pattern of the **AUTO PLAY CHORD** is composed of four parts: **ACCOMP 1, 2, 3** and **BASS**.

1. Press the **SUB BALANCE/MIDI** button one time. Its indicator lights.

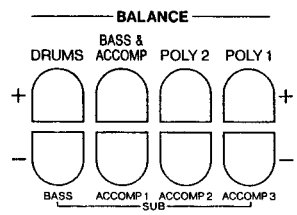


2. Adjust the volume of each part with the corresponding **BALANCE** buttons. The volume for each part can be set independently to one of ten levels.

KN200

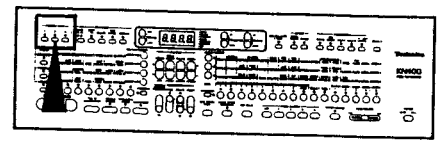


KN400

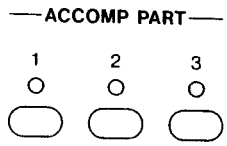


- KN200: The **ACCOMP 2** and **ACCOMP 3** volumes are set together.
- Keep the button pressed to change the volume continuously.
- No sound is produced for a part if its volume is set to 0.

3. Press the **SUB BALANCE/MIDI** button two times to turn it off.



ACCOMP PART on/off (KN400)



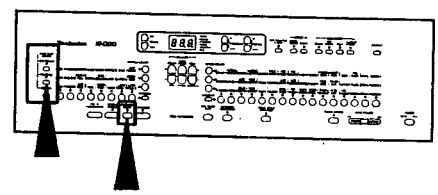
Use the **1**, **2** and **3** buttons in the **ACCOMP PART** section to turn each part on or off independently.

- The accompaniment pattern is not produced if all the **ACCOMP PART** buttons are off.
- The **ACCOMP PART** sounds cannot be selected.
- If the **ACCOMP PART 2** and **3** buttons are both off, the number of notes which can be produced on the right keyboard increases.

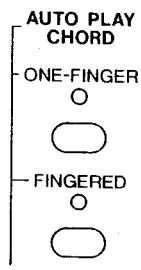
POLY 1	POLY 2
7	—
—	7
4	3

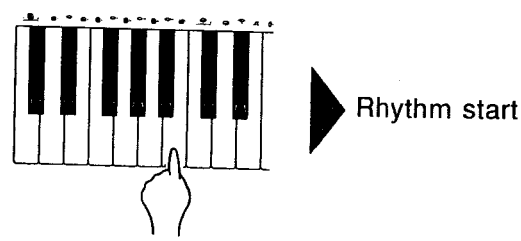
Break function

With the break function, the rhythm starts when the left keyboard is played and stops when the fingers are removed from the keys. When the keys are pressed again, the rhythm starts from the first beat.

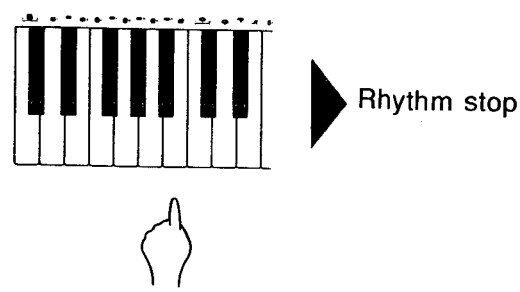


1. Press the **ONE-FINGER** or **FINGERED** button to turn it on.

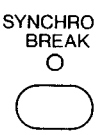




- At this time, the **MEMORY** button should be off.

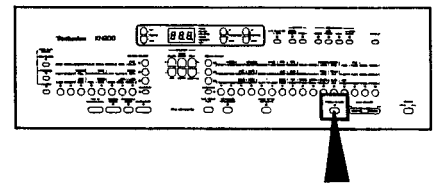


2. Press the **SYNCHRO & BREAK** button to turn it on.

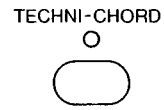


ENGLISH

Techni-chord

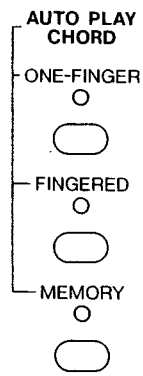


The **TECHNI-CHORD** feature expands the sound of your performance so that for each single note played, a chord is formed when the **AUTO PLAY CHORD** or **SEQUENCER** function is used (refer to page 14 and Vol. 3, page 3).

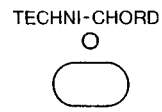


Set up your keyboard to play the example below.

1. Press the **ONE-FINGER** or **FINGERED** button of the **AUTO PLAY CHORD** to turn it on.



2. Press the **TECHNI-CHORD** button to turn it on.



3. KN400: Turn on the **POLY 1** button in the **CONDUCTOR**.

4. Select the **ACCORDION** sound in the **SOUND SELECT** matrix.

5. On the left part of the keyboard, play the note for the chord.

6. On the right part of the keyboard, play the melody. The melody is automatically played in block chords.

- If the chords for the **ACCOMP** part have been stored in the **SEQUENCER**, the melody can be played on the entire keyboard. (Refer to Vol. 3, page 3.)
- **TECHNI-CHORD** functions only for the **POLY** sounds.
- KN400: Either the **POLY 1** or **POLY 2** in the **CONDUCTOR** can be used for the **TECHNI-CHORD**.
- KN400: The **TECHNI-CHORD** functions if the **POLY 1** is selected for the right part and the **POLY 2 L** is selected for the left part in the **CONDUCTOR** even if the **AUTO PLAY CHORD** is off.

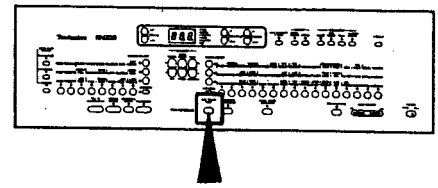
One Touch Play

With the **ONE TOUCH PLAY** feature, the sounds and effects, etc. matching the selected rhythm are easily set in seconds and you are ready to play immediately.

1. Select the rhythm pattern with the buttons of the **RHYTHM SELECT** matrix.
- KN400: Do not select a rhythm with the **COMP 1~4** buttons, or else the **ONE TOUCH PLAY** function will not work properly.

2. Press the **ONE TOUCH PLAY** button until the panel settings change.

ONE TOUCH
PLAY

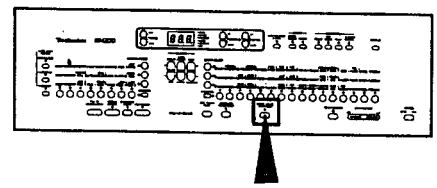


3. The **AUTO PLAY CHORD** and **SYNCHRO & BREAK** functions are automatically turned on. The automatic rhythm begins to play immediately when a key on the left keyboard is pressed.

ENGLISH

Music Style Arranger

The **MUSIC STYLE ARRANGER** is a new feature from Technics which allows you to change registrations very quickly just by pushing the **FILL IN** button. In a normal piece of music at least three registration changes are desirable. The original registration will come back after the **FILL IN** button is pressed three times. This means that you have three registration possibilities every rhythm in your keyboard. The change of registration will take place immediately after the fill-in (one measure).
Additionally you can store registrations in the **PANEL MEMORY** buttons (**1~4**). Combining the **MUSIC STYLE ARRANGER + PANEL MEMORY** gives you seven instant registrations use while playing.



1. Select a rhythm from the **RHYTHM SELECT** matrix.

2. Press the **MUSIC STYLE ARRANGER** button to turn it on.

MUSIC STYLE
ARRANGER

- The indicator lights.
- The **AUTO PLAY CHORD** and **SYNCHRO & BREAK** functions are automatically turned on.

3. Press a key on the left keyboard to start the rhythm.

4. Each time the **FILL IN** button is pressed, the sounds and effects change.

Technics

KEYBOARD

SX-KN200
SX-KN400
SX-KN220
SX-KN440

Vol. 3

ENGLISH FRANÇAIS ESPAÑOL 中文

QQTG0035A

VOL. 3

PRACTICAL APPLICATIONS

This volume comprises a detailed explanation of **SEQUENCER**, **COMPOSER**, Function Setting and MIDI.
Read the parts which are relevant to the functions you wish to use.

APPLICATIONS PRATIQUES

Ce tome comprend les explications détaillées sur **SEQUENCER**, **COMPOSER**, réglage des fonctions et MIDI.
Lisez les articles concernant les fonctions que vous souhaitez utiliser.

APLICACIONES PRACTICAS

Este tomo consta de una explicación detallada del **SEQUENCER**, **COMPOSER**, Ajuste de las funciones y MIDI.
Lea las partes relacionadas a las funciones que desea utilizar.

應用篇

在VOL. 3對於**SEQUENCER**(程序處理)程**COMPOSER**(編輯器)的應用功能、設定方法以及MIDI的應用操作加以詳細說明。
如欲利用上述功能時，請翻閱本篇，則善於應用豐富的技巧。

ENGLISH

FRANÇAIS

ESPAÑOL

中文

Contents

ENGLISH

Part III Recording and playback 3

Sequencer 3

- Let's store the following music. 4
- Playing back the recorded performance 6
- Advanced applications 7
- Storing two or more parts at the same time 7
- Storing a chord progression 8
- Storing rhythm changes 10
- An example of storing in the Sequencer 11

Composer (KN400) 14

- Create an accompaniment pattern. 15
- Editing a preset rhythm pattern 20
- Play back the stored pattern 21

Part IV Function setting mode 23

Setting the functions 23

- Tuning 23
- PANEL MEMORY expanded mode (KN400) ... 23
- Assigning a function to the foot switch 24
- Modulation depth 25
- Initializing the function settings 26

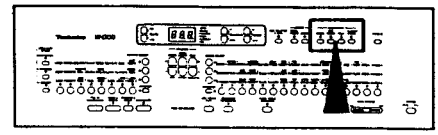
Part V MIDI 27

- What is MIDI? 27
- The following kinds of data can be transmitted/received 28
- Setting MIDI functions 30

MIDI implementation chart 138

Part III Recording and playback

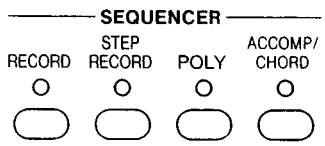
Sequencer



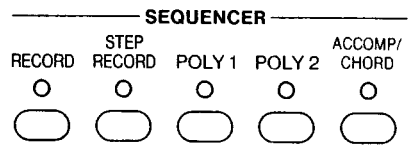
The **SEQUENCER** stores your entire performance—melody and accompaniment, sound and panel setting changes, even changes in the rhythm—for completely automatic playback whenever you desire.

The performance can be stored part by part: **POLY** (KN200), **POLY 1**, **2** (KN400) and **ACCOMP/CHORD**.

KN200



KN400



■ Data which can be stored in each track

When all the tracks are set to the recording mode, all the panel settings (except for **TEMPO**) are automatically stored at the beginning of the song. In addition, the following data is stored during recording.

Part	What you can store
POLY (KN200) **POLY 1** (KN400) **POLY 2** (KN400)	**RHYTHM START/STOP**, **FILL IN**, **INTRO & ENDING**, performance data, and changes in the **SOUND SELECT** settings, ****BALANCE** settings, **EFFECT** settings, **PITCH BEND/MODULATION** data (KN400), glide on/off data (except **POLY 2**).
***ACCOMP/CHORD**	**RHYTHM START/STOP**, **FILL IN**, **INTRO & ENDING**, performance data, **ACCOMP PART** status, **AUTO PLAY CHORD**, and changes in the tempo setting, ****BALANCE** settings (**DRUMS**, **BASS & ACCOMP**), **RHYTHM SELECT** settings, **PITCH BEND/MODULATION** data (KN400), the **PANEL MEMORY** status, and **TRANSPOSE** status

*For the **ACCOMP/CHORD** part, in addition to the performance you actually play and record in real-time, you can also use the **STEP RECORD** function to record the chord progression step by step.
****SUB BALANCE** setting are not stored.

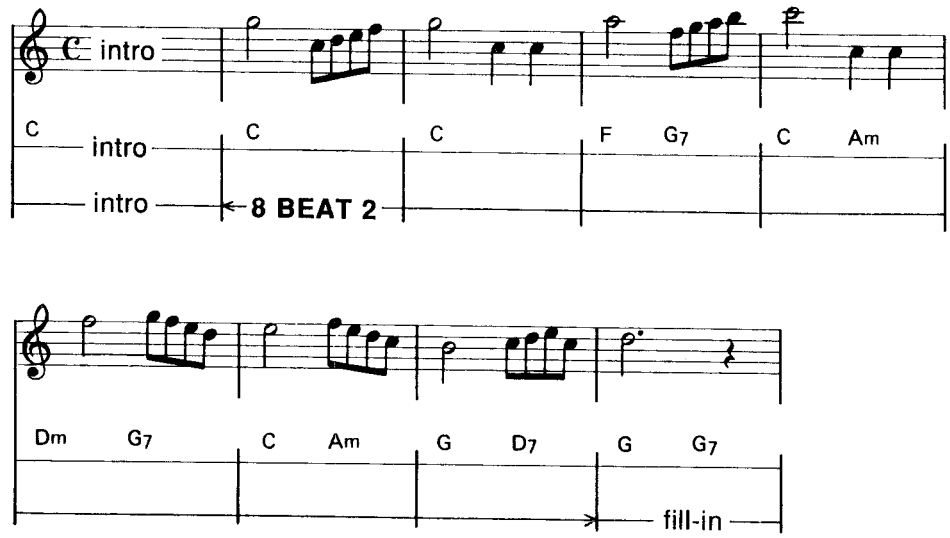
Let's store the following music.

ENGLISH

Registration: **POLY (1).....SPECIAL 6**
RHYTHM.....8 BEAT 2
AUTO PLAY CHORD.....**FINGERED** on
SYNCHRO & BREAK .....on

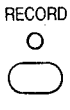
POLY (1) track

ACCOMP/CHORD track
(AUTO PLAY CHORD)

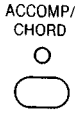


Storing each part (multi-track storage)

1. Set the sound, rhythm, **AUTO PLAY CHORD**, etc. before starting to play.
   - If you wish to insert an intro, press the **INTRO & ENDING** button to turn it on.
2. Press the **RECORD** button in the **SEQUENCER** section. Its indicator lights.



3. Press the **SEQUENCER** button for the part you wish to store first (for example, the **ACCOMP/CHORD** button). The indicator for the part flashes slowly.



4. Now play the part: Play the C chord on the left keyboard to begin recording.

- Listen to the intro which plays for 4 measures.
- When the rhythm is not used, do not start the rhythm. The rhythm can be started and stopped any time during the performance, as desired.

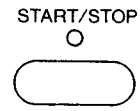
5. When you have finished playing the part, press the **RECORD** button to turn it off.

- If the rhythm is on, it will stop automatically.
- At this time, confirm that the indicator for the part already stored is still lit.

6. Press the **RECORD** button. Its indicator lights.

7. Press the **SEQUENCER** button for the next part to be stored (for example, **POLY** (**1**)). The indicator of the selected part will flash slowly.
- Confirm that the indicator for the part you selected in step 3 is lit.

8. Press the **START/STOP** button. The part(s) already stored will be played, and you can play in time with it to store the next part.
- Use the **START/STOP** button to start playback of the already-stored part(s), even for a song which has no rhythm.



- If you wish to end a part before the end of the song, you do not have to wait until the entire song has been played back. You can press the button to record the next part at any time, but in this case, do not stop the rhythm.

9. When you have finished storing all the parts, press the **RECORD** button again to turn it off.

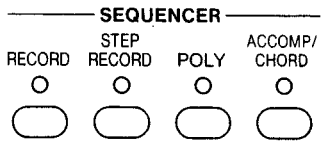
ENGLISH

Playing back the recorded performance

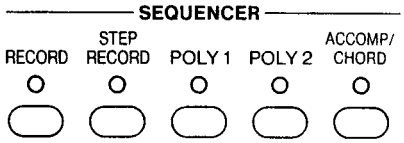
ENGLISH

1. Press to turn on the **SEQUENCER** button(s) for the parts of the performance you wish to have played back.

KN200



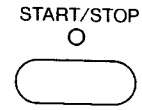
KN400



- Make sure that only the **SEQUENCER** indicators for the parts you wish to have played back are lit. (If the **SEQUENCER** indicator for another part is turned on, the wrong melody may be played or the rhythm may stop during the performance.)

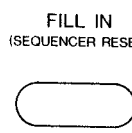
2. Press the **SEQUENCER RESET** button.

3. Press the **START/STOP** button to begin the automatic playback.



- Use the **START/STOP** button to start playback even if the song has no rhythm.
- If the **START/STOP** button is pressed during automatic playback of the recorded performance, playback will stop. If the **START/STOP** button is pressed again, playback will continue from the point at which it stopped. Note, however, that if the rhythm was stored with the song, the rhythm does not start in this case.

SEQUENCER RESET



When the **START/STOP** button is off, by pressing the **SEQUENCER RESET** button for 1~2 seconds, the indicators for the parts which have been stored turn on and the panel settings change to the settings at the beginning of the stored performance.

- If the **START/STOP** button is pressed during automatic playback of a performance, to return to the beginning of the performance, press the **SEQUENCER RESET** button.

Advanced applications

Storage capacity

Expressed in terms of notes, the total storage capacity of the **SEQUENCER** is approximately 1600 notes.

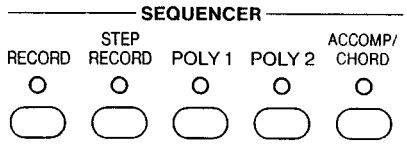
- Data such as sound changes etc. can be stored for each part, but will reduce the storage capacity accordingly.

- **How to count the number of notes**
  The cycle of one key being pressed and released is counted as one note.
- When the remaining storage capacity becomes 20% or less, it is shown as a percentage (%) on the display.
- When "0" is shown on the display and the "beep, beep, beep" error message sounds, no more data can be stored in the **SEQUENCER**.
- The tempo can be freely adjusted during playback. Therefore, you may record the performance by playing the keyboard slowly.
- If new songs are stored over songs already stored, the previously stored songs are erased.

Storing two or more parts at the same time

By setting up the **SEQUENCER** to record multiple tracks, you can perform and record multiple parts at one time.

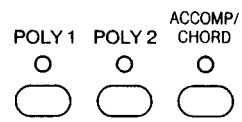
(KN400)



1. Set the beginning sounds and effects before starting to play.

2. Press the **RECORD** button in the **SEQUENCER** section. Its indicator lights.

3. Press the **SEQUENCER** buttons for the parts you wish to store. The indicators flash slowly.
   (KN400)

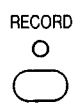


4. Play.

- Keyboard sounds are produced according to the **CONDUCTOR** settings.

- KN400: When storing the **POLY 1** or **POLY 2** part, select the respective part on the **CONDUCTOR** before selecting the sound.
- When recording the **ACCOMP/CHORD** track during multiple-track recording, be sure to turn on the **ONE-FINGER** or **FINGERED** button of the **AUTO PLAY CHORD** before storing chords.
- KN400: When recording both the **POLY 2** and **ACCOMP/CHORD** tracks, turn off the **ACCOMP PART 2** and **3** buttons.

5. When you have finished playing, press the **RECORD** button to turn it off.

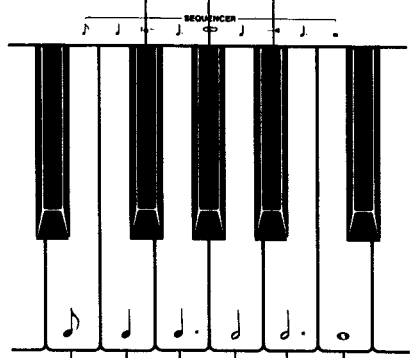


Storing a chord progression

The **ACCOMP/CHORD** part can be stored using the **STEP RECORD** function of the **SEQUENCER**.

In addition to the **SEQUENCER** buttons, the nine keys indicated on the right part of the keyboard are used for storing with the **STEP RECORD** method.

ENGLISH



Reset key

: Press to begin storing from the beginning.

Repeat key

: Press to complete storage and specify automatic repeat playback of the stored performance.

End key

:Press after all of the performance has been stored (if automatic repeat playback is not desired).

Note keys

: Press to store a whole note.

. : Press to store a dotted half note.

: Press to store a half note.

. : Press to store a dotted quarter note.

: Press to store a quarter note.

: Press to store an eighth note.

ACCOMP/CHORD

Chord progressions and changes in the sounds, effects and rhythm can all be stored in the **ACCOMP/CHORD** part.

Store the following example:

1. Set up the panel with a rhythm, sounds and effects which fit the tune.

2. Press the **STEP RECORD** button of the **SEQUENCER** section. Its indicator lights.

- If the **AUTO PLAY CHORD** function was not activated, the mode now changes automatically to the **FINGERED** mode of the **AUTO PLAY CHORD**.
- The **ACCOMP/CHORD** indicator flashes slowly.

3. Store one measure of a C chord.

Specify the chord Specify the note unit

While holding down a C chord on the left part of the keyboard, press the 𝅝 key to specify a whole note (one measure of C chord).

- A "beep" will sound to indicate that the chord has been stored.
- If, while holding down a C chord, the 𝅝 key is pressed two times, the C chord will be stored for two measures.

4. Store one measure of an F chord.
While holding down an F chord on the left part of the keyboard, press the 𝅝 key to specify a whole note (one measure of an F chord).

5. In the same way, store one measure of a G chord and one measure of a C chord.

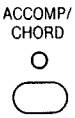
6. Press the —𝄋 key to end storage.
- If you want the sequence to be repeated automatically, instead of the —𝄋 key, press the ⮌ key. (In the case of a 3-beat rhythm, if an intro is used or if the number of measures is an odd number, the timing will be off.)
- To insert an ending pattern, press the **INTRO & ENDING** button instead of the —𝄋 key.

- To store the sequence again (redo) from the beginning, press the reset key 𝄞— and begin storing again from step 3.

ENGLISH

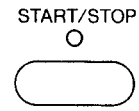
Automatic playback of the stored chord sequence

1. Turn on the **ACCOMP/CHORD** button.



2. Press the **SEQUENCER RESET** button.

3. Select a rhythm and press the **START/STOP** button to start the rhythm. The stored chord sequence is automatically played back.



ENGLISH

Storing rhythm changes

In addition to chord progressions, you can also store changes in the rhythm by using the **STEP RECORD** function.

■ Storing the beginning panel settings

1. Select the sounds, effects and rhythm on the panel.

2. Press the **STEP RECORD** button to turn it on.

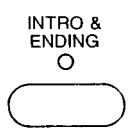
- Its indicator flashes.
- The beginning panel settings (except for **TEMPO**) are stored.

3. Store the chords.

■ Storing an intro

1. Press the **STEP RECORD** button to turn it on.

2. Press the **INTRO & ENDING** button to turn it on.



3. Store the chords.

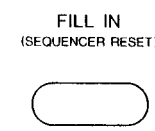
- During playback, after the **DRUMS** intro pattern is played, the **ACCOMP** and **BASS** rhythm patterns are added.
- If you wish the intro to include the **ACCOMP** and **BASS** patterns, first turn on the **STEP RECORD** button, then, while holding down a chord on the keyboard, turn on the **INTRO & ENDING** button.

■ Storing a rhythm change in the middle of the tune

1. Store the chord progression up to the point where the rhythm changes.
2. Select a different rhythm.
- A "beep" will sound to indicate that the change has been stored.

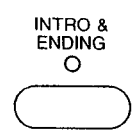
3. Continue storing the chord progression.

■ Storing a fill-in



To store a drums-only fill-in pattern, press the **FILL IN** button, then use the note unit keys to specify the number of notes in the fill-in.
To store a fill-in played as part of the accompaniment pattern, press the **FILL IN** button, then store a chord.

■ Storing an ending



If the **INTRO & ENDING** button is pressed at the end of the tune, an ending pattern is stored and the **STEP RECORD** button turns off.

If the **INTRO & ENDING** button is pressed while the keys for a chord are pressed, the ending will be played as part of the accompaniment pattern.

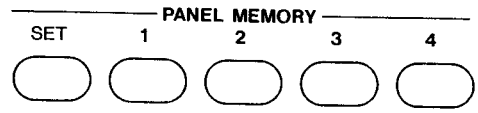
■ Storing a 3-beat rhythm

When storing chords for a 3-beat rhythm such as the **WALTZ** or **JAZZ WALTZ**, specify the note units for one measure of a chord as 𝅗𝅥. .

■ Storing sound changes in the middle of the tune (KN400)

Changes in the **PANEL MEMORY** selection can be stored in the **SEQUENCER**.

1. Store the chord progression up to the point where the **PANEL MEMORY** selection changes.
2. Press one of the **PANEL MEMORY 1~4** buttons.



- A "beep" will sound to indicate that the change has been stored.

3. Continue storing the chord progression.

An example of storing in the Sequencer

What to store

Chord		C	F	C	G_7	Em	A_7	Dm G_7	C	C
FILL IN, INTRO, ENDING	INTRO				FILL IN					ENDING
RHYTHM	FUNK					16 BEAT				

How to store

FUNK → STEP RECORD → INTRO & ENDING →

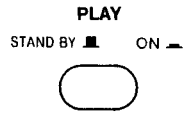
C • 𝅝 → F • 𝅝 → C • 𝅝 → FILL IN →

G_7 • 𝅝 → 16 BEAT → Em • 𝅝 → A_7 • 𝅝 →

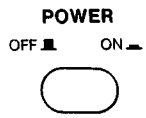
Dm • 𝅗𝅥 → G_7 • 𝅗𝅥 → C • 𝅝 → C • INTRO & ENDING

To clear specific parts or the entire performance

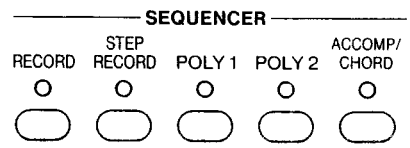
[KN200]
Press the **PLAY** button to turn it off (**STANDBY**). The entire contents of the **SEQUENCER** are erased.



[KN400]
The **SEQUENCER** contents remain in the memory for about one week after the **POWER** button is turned off.



■ **To clear the entire contents of the SEQUENCER**
While pressing the **RECORD** button in the **SEQUENCER** section, turn the **POWER** button on. The indicators for all the **SEQUENCER** parts flash.



■ **To clear specific parts of the SEQUENCER**
While pressing the button for the **SEQUENCER** part you wish to clear (for example, **POLY 2**), turn the **POWER** button on. The indicator for the specified part flashes.

■ **About the maximum number of notes which can sound from the SEQUENCER parts**

The maximum number of notes which can be recorded in or played back from each track of the **SEQUENCER** changes depending on the status of the **AUTO PLAY CHORD** and **ACCOMP PART** (KN400).

In general, the number of notes can be calculated as follows.

When recording/playing back only one track

■ **KN200**

POLY track ..... 11 notes
ACCOMP/CHORD track .....4 notes

■ **KN400**

POLY 1 track.... 11 notes
POLY 2 track.... 11 notes
ACCOMP/CHORD track .....4 notes

When recording/playing back both the POLY 1 and POLY 2 tracks (KN400)

POLY 1 track.... 7 notes
POLY 2 track.... 4 notes

- Even when the **ONE-FINGER** or **FINGERED** button of the **AUTO PLAY CHORD** is on, and the **ACCOMP PART 2** and **3** buttons are on, the notes stored in or played back from the **POLY 2** part of the **SEQUENCER** have priority.

When recording/playing back the POLY track while playing the ACCOMP/CHORD track

■ **KN200**

POLY track.....4 notes

■ **KN400**

With ACCOMP PART 2 and 3 on

POLY 1 track....4 notes
POLY 2 track....(Not available for recording/playback)*

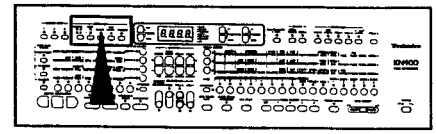
*The **ACCOMP/CHORD** track recording/playback has priority over **POLY 2** track recording/playback.

With ACCOMP PART 2 and 3 off

POLY 1 track	**POLY 2** track
7 notes	—
—	3 notes
4 notes	3 notes

Please note that these are general rules and that the exact number of notes recorded in or played back from each part may differ depending on the selected sound or settings.

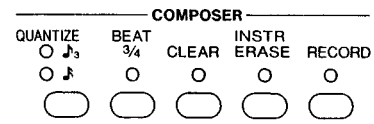
Composer (KN400)

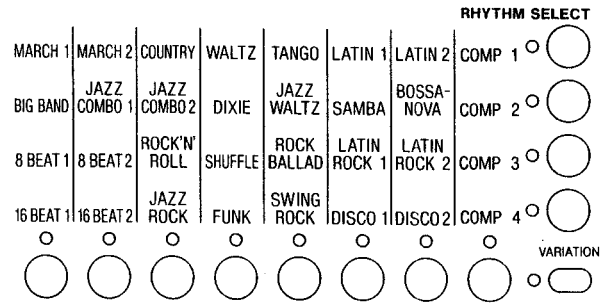


With the **COMPOSER** you can create original rhythms, or you can edit preset rhythms as desired. Then store up to four of your creations in the **COMP 1~4** buttons for instant recall.

In the **COMPOSER** section, the five parts comprising the rhythm—**DRUMS**, **BASS** and **ACCOMP 1, 2, 3**—are selected with the **RECORD** button and added one at a time.

Although you may choose to store only one or two parts in the **COMPOSER**, the **BASS** and **ACCOMP 1, 2, 3** parts should be stored if using the **AUTO PLAY CHORD** feature.





Here is what the parts of the **COMPOSER** do:

RECORD: Press this button and the part indicated on the display is available for storing. Each time the button is pressed, the part available for storing changes.

INSTR ERASE: Use this button to delete the pattern of a specific instrument from the **DRUMS** part.

CLEAR: When this button is pressed, the contents of the part indicated on the display are cleared.

BEAT: Press this button to specify 3/4 time. When it is off, the time signature is 4/4 time.

QUANTIZE: By turning on this function before recording, the timing of the recorded performance is automatically "evened out."

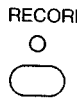
COMP 1~4: Store four of your original patterns in these buttons for instant recall.

Create an accompaniment pattern.

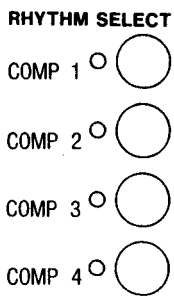
A repeating two-measure pattern is stored by playing in real-time on the keyboard.

I. Setting up to store the rhythm pattern

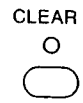
1. Press the **RECORD** button in the **COMPOSER** section. The **COMP 1~4** indicators flash.



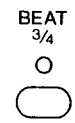
2. Press one of the **COMP 1~4** buttons in which you will store your new rhythm pattern. The indicator for the selected button lights. " A L L " appears on the display.



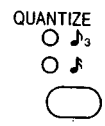
3. When creating a new rhythm pattern, all parts of a previously stored rhythm in the selected number button can now be deleted by pressing the **CLEAR** button.



4. To record a pattern in 3/4 time, press the **BEAT** button to turn it on.



5. To use the quantize function, use the **QUANTIZE** button to select $\overset{3}{\frown}$ or $\frown$. (Refer to page 19.)

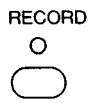


ENGLISH

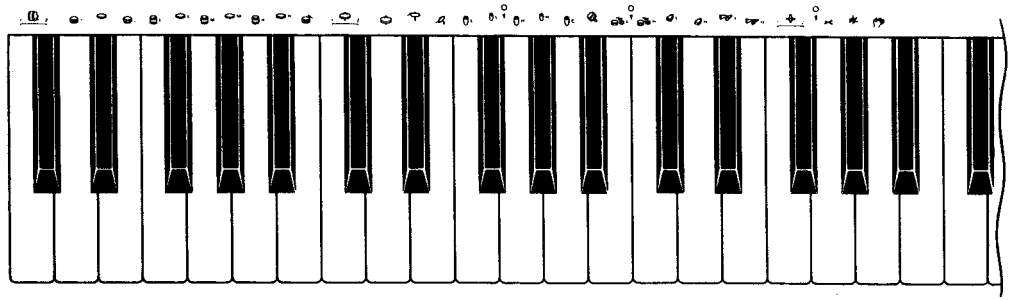
ENGLISH

II. Storing the DRUMS part

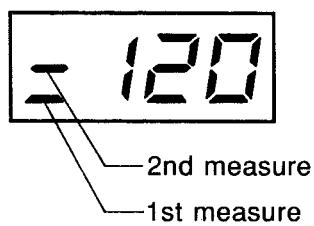
1. Press the **RECORD** button in the **COMPOSER** section. " d r " appears on the display. The metronome starts. (If the **DRUMS** part has not been cleared, any previously stored **DRUMS** rhythm can also be heard.)



2. Play the desired percussive keys on the keyboard in time with the metronome for two measures.



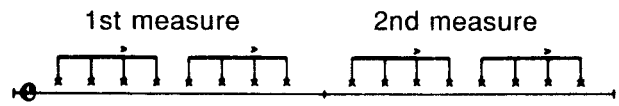
- You can distinguish the 1st measure from the 2nd measure by the horizontal lines on the display.



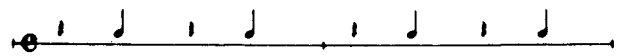
- If you press a percussive key while pressing the **INSTR ERASE** button, that instrument will be deleted for as long as the **INSTR ERASE** button is pressed.
- Up to four instruments can sound with the same timing. However, if the **MANUAL PERCUSSION** is played with the **COMPOSER** during playback, the number of **DRUMS** instruments that sound becomes less.
- Adjust the tempo as necessary.
- If either **QUANTIZE** level is selected during recording, any unevenness in the timing of the performance is smoothed out. The default setting is ♪. (Refer to page 19.)
- Any contents stored in the **DRUMS** part can be deleted by pressing the **CLEAR** button.

Store the following example:

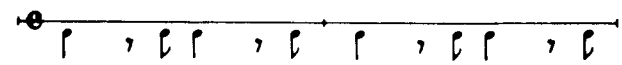
Hi-hat closed



Snare drum

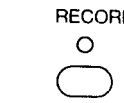


Bass drum



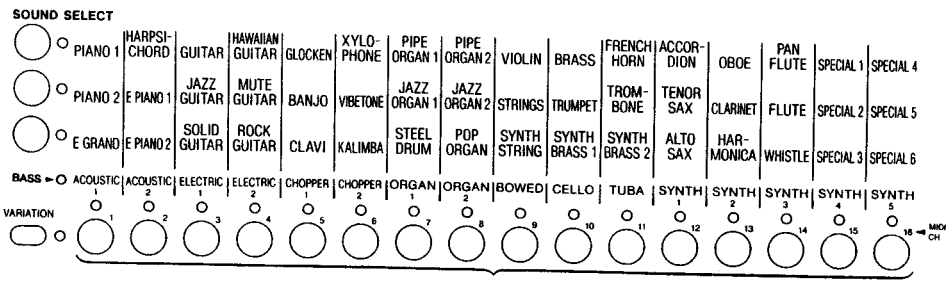
III. Storing the BASS part

1. Press the **RECORD** button in the **COMPOSER** section. The display changes to show " b A S ". In addition to the metronome and the **DRUMS** pattern just stored, any previously stored **BASS** and **ACCOMP** patterns now sound.



- If you wish to delete all the previously stored **BASS** part, press the **CLEAR** button.

2. Use the 16 buttons in the horizontal row of the **SOUND SELECT** matrix to select the **BASS** sound.



Select the **BASS** sound (indicated in the bottom row) with these buttons.

3. Play two measures of the **BASS** pattern on the keyboard.

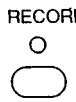
- Record the performance in C major for correct chord progressions during playback.
- The **BASS** pattern can be played on the entire keyboard, regardless of the indicated split point. However, those notes played on C4 or higher will sound in a lower octave.
- Play the **BASS** pattern for two measures to store it. Then, as the two-measure pattern is repeated, you can play the keyboard to add notes to the pattern. The final version of the **BASS** pattern is the one that is stored.
- Adjust the tempo as necessary.
- If either **QUANTIZE** level is selected during recording, any unevenness in the timing of the performance is smoothed out. The default setting is ♪. (Refer to page 19.)

Here is what you play:

BASS part

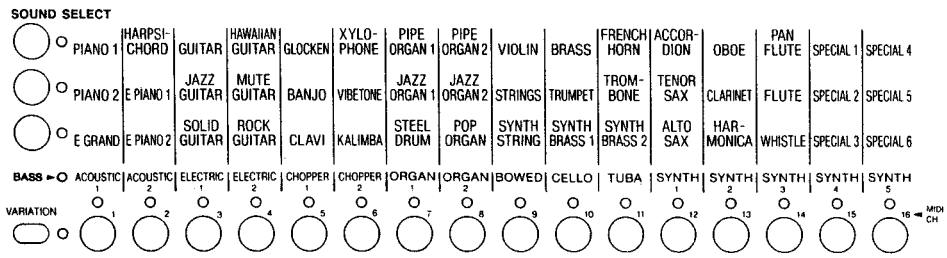
IV. Storing the ACCOMP 1 part

1. Press the **RECORD** button in the **COMPOSER** section. The display changes to show " A C 1 ". In addition to the patterns stored for the **DRUMS** and **BASS** parts, any previously stored **ACCOMP 1** pattern now sounds.



- If you wish to delete all the previously stored **ACCOMP 1** part, press the **CLEAR** button.

2. Select the **ACCOMP 1** sound with the buttons in the **SOUND SELECT** matrix. Select any of the preset sounds by pressing one of the 3 vertical row buttons and one of the 16 horizontal row buttons.

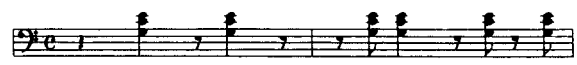

SOUND SELECT
PIANO 1 HARPSI-CHORD GUITAR HAWAIIAN GUITAR GLOCKEN XYLO-PHONE PIPE ORGAN 1 PIPE ORGAN 2 VIOLIN BRASS FRENCH HORN ACCOR-DION OBOE PAN FLUTE SPECIAL 1 SPECIAL 4
PIANO 2 E PIANO 1 JAZZ GUITAR MUTE GUITAR BANJO VIBETONE JAZZ ORGAN 1 JAZZ ORGAN 2 STRINGS TRUMPET TROM-BONE TENOR SAX CLARINET FLUTE SPECIAL 2 SPECIAL 5
E GRAND E PIANO 2 SOLID GUITAR ROCK GUITAR CLAVI KALIMBA STEEL DRUM POP ORGAN SYNTH STRING SYNTH BRASS 1 SYNTH BRASS 2 ALTO SAX HAR-MONICA WHISTLE SPECIAL 3 SPECIAL 6
BASS ACOUSTIC 1 ACOUSTIC 2 ELECTRIC 1 ELECTRIC 2 CHOPPER 1 CHOPPER 2 ORGAN 1 ORGAN 2 BOWED CELLO TUBA SYNTH 1 SYNTH 2 SYNTH 3 SYNTH 4 SYNTH 5
VARIATION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
MIDI CH

3. Play two measures of the polyphonic **ACCOMP 1** pattern on the keyboard.

- Record the performance in C major for correct chord progressions during playback.
- Up to 4 notes can sound at the same time.
- Play the **ACCOMP 1** pattern for two measures to store it. Then, as the two-measure pattern is repeated, you can play the keyboard to add notes to the pattern. The final version of the **ACCOMP 1** pattern is the one that is stored.
- When the **CLEAR** button is pressed, the **ACCOMP 1** part is completely erased.
- Adjust the tempo as necessary.
- If either **QUANTIZE** level is selected during recording, any unevenness in the timing of the performance is smoothed out. The default setting is ♪. (Refer to page 19.)

Here is what you play:

ACCOMP 1 part



V. Storing the ACCOMP 2/ACCOMP 3 parts

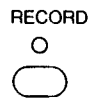
Press the **RECORD** button again. You can record the **ACCOMP 2** part and the **ACCOMP 3** part in the same manner as for the **ACCOMP 1** part.

- Up to 3 notes can sound at the same time from the combined **ACCOMP 2** and **ACCOMP 3** parts.

VI. Finish storing the rhythm

When all the parts to the pattern have been stored as desired, press the **RECORD** button of the **COMPOSER** once again to complete the storage operation.

- The **RECORD** button turns off, and the display returns to the tempo display.

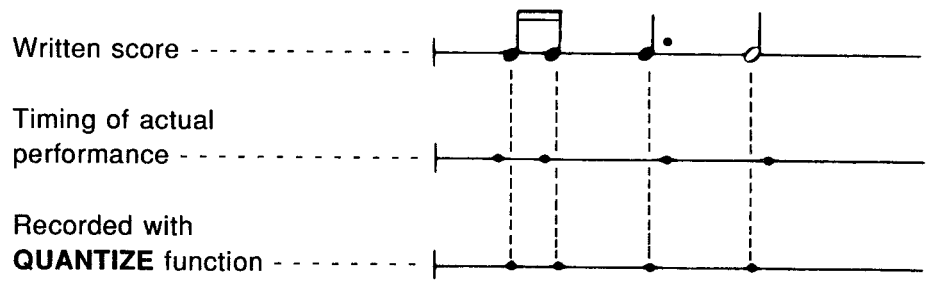


About the QUANTIZE function

When you play the keyboard, your timing may not be exact, and that is the way it will be recorded and played back. However, when you record with the **QUANTIZE** function on, any unevenness in the timing of your performance is smoothed out.

To record with the **QUANTIZE** function on, just press the **QUANTIZE** button to select the ♪3 or ♪ degree of resolution. For triplet-type patterns, select ♪3 ; for other patterns, select ♪ . (Note, however, that note units smaller than the selected **QUANTIZE** level will not be recorded correctly. In this case, record with the **QUANTIZE** function off.)

For example, if you record the following music with the **QUANTIZE** level set to ♪:



- The **QUANTIZE** function also works for **PITCH BEND**. In order to store a smooth, continuous **PITCH BEND**, the **QUANTIZE** function must be off.

Storage capacity

Expressed in terms of notes, the total storage capacity of the **COMPOSER** is approximately 600 notes.

- When the remaining storage capacity becomes 50 notes or less, the display shows the number of notes which can be stored.
- When "0" is shown on the display and the "beep, beep, beep" error message sounds, no more data can be stored in the **COMPOSER**.

ENGLISH

Editing a preset rhythm pattern

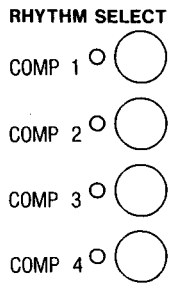
The editing feature of the **COMPOSER** allows you to modify any of the factory-preset rhythms or even your original rhythms, and then store the new patterns in the four **COMP** buttons.

ENGLISH

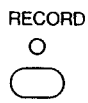
1. Select the rhythm to be modified with the buttons in the **RHYTHM SELECT** matrix.

2. Press the **RECORD** button in the **COMPOSER** section.

3. Press one of the **COMP 1~4** buttons in which to store the modified rhythm pattern. The selected rhythm is now recalled. " A L L " appears on the display.



4. Press the **RECORD** button 1 to 5 times so that the indicator for the part you wish to edit is lit. For example, if you want to modify the **BASS** part, press the **RECORD** button two times.

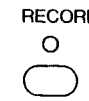


5. You can clear the part and begin storing it from the beginning, or you can edit the part without clearing it.

- Press the **CLEAR** button ONLY if you wish to delete all of the pattern for the selected part and store a new pattern from the beginning.

6. If desired, use the **RECORD** button to select other parts to modify.

7. When you have completed making the modifications, press the **RECORD** button the number of times required for the **RECORD** button indicator to turn off. The modified version of the rhythm pattern is now stored in the specified **COMP** button.



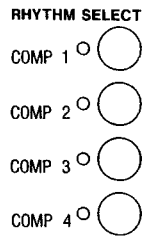
■ **Note regarding modification of preset rhythm patterns**

Preset rhythms which are stored in the **COMP** buttons may have a somewhat different nuance from the original preset rhythms.

Play back the stored pattern

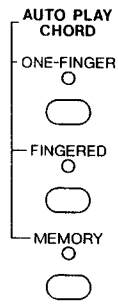
The rhythm pattern you stored in the **COMPOSER** is played back automatically while you specify the chords in the same manner as for the **AUTO PLAY CHORD**.

1. Press the button in which the rhythm pattern is stored (one of the **COMP 1~4** buttons in the **RHYTHM SELECT** matrix).



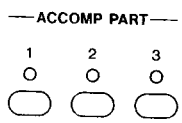
- The indicator lights.

2. Press the **ONE-FINGER** button or **FINGERED** button of the **AUTO PLAY CHORD** to turn it on.



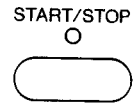
- The indicator lights.

3. Press the **ACCOMP PART 1**, **2** and **3** buttons to turn them on.



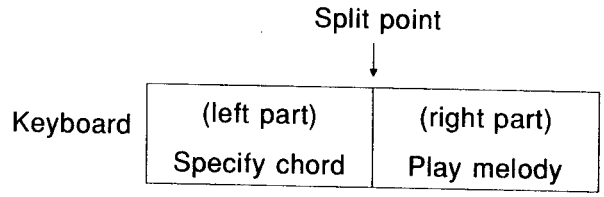
- The indicators light.

4. Press the **START/STOP** button.



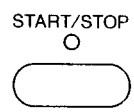
- The **DRUMS** pattern begins to play.

5. Specify the chord on the left part of the keyboard, and play the melody on the right part.



- The **BASS** and **ACCOMP 1**, **2** and **3** parts are played back in the chord you specify on the keyboard.

6. To stop the rhythm pattern playback, press the **START/STOP** button.



Notes:

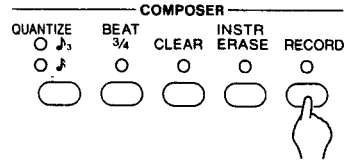
- Select the keyboard split point with the **KEY SPLIT** button.
- You can turn off any of the **ACCOMP PART** buttons during playback if you do not wish the correponding part(s) to be played back.
- Adjust the volume of the **BASS** and **ACCOMP PART 1**, **2** and **3** with the corresponding **BALANCE** buttons. (Refer to Vol. 2, page 5.)

FILL IN, INTRO and **ENDING** patterns

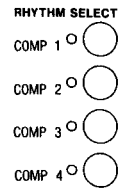
- If a preset rhythm pattern was edited and stored in a **COMP** button, when the **FILL IN** or **INTRO & ENDING** button is pressed while the pattern is playing back, the **FILL IN, INTRO** or **ENDING** pattern corresponding to the original rhythm will sound.
- If the **COMP** button's memory is erased and a completely new pattern is stored, the **FILL IN, INTRO** and **ENDING** patterns that sound will be those of the rhythm which was selected immediately before beginning the recording procedure.

Outline of storing in the COMPOSER

1



2 Press one of the **COMP** buttons (**1~4**) to turn it on.

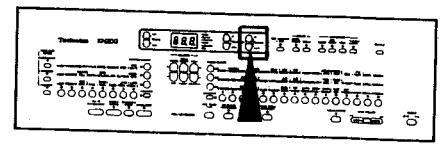


	RECORD button	Display	Storable part	CLEAR button	QUANTIZE	BEAT	INSTR ERASE
3	RECORD	ALL	—	All parts erased	—	4/4 or 3/4	—
4	RECORD	dr	**DRUMS**	**DRUMS** part erased	Select before storing.	—	Erase for each instrument.
5	RECORD	bAS	**BASS**	**BASS** part erased	Select before storing.	—	—
6	RECORD	AC 1	**ACCOMP 1**	**ACCOMP PART 1** part erased	Select before storing.	—	—
7	RECORD	AC2	**ACCOMP 2**	**ACCOMP PART 2** part erased	Select before storing.	—	—
8	RECORD	AC3	**ACCOMP 3**	**ACCOMP PART 3** part erased	Select before storing.	—	—
9	RECORD	120 (tempo)	—	—	—	—	—

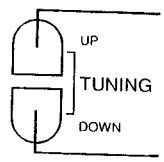
Part IV Function setting mode

Setting the functions

Tuning



With this function you can fine-tune the pitch of the entire instrument.

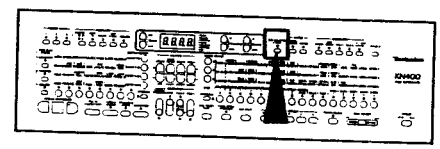


Press this button to raise the pitch.

Press this button to lower the pitch.

- The pitch is shown on the display.
- Press the two buttons at the same time to reset the pitch to 440.0 Hz.
- The pitch is adjustable within a range of 427.3 Hz to 453 Hz.
- The decimal display changes as follows: 0.3 → 0.6 → 1.0.

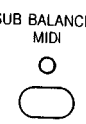
PANEL MEMORY expanded mode (KN400)



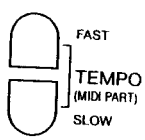
You can set the range of panel settings which are stored in the **PANEL MEMORY** locations.
In addition to the normal mode settings (refer to Vol. 2, page 8), the following settings are storable in the expanded mode:

- **RHYTHM SELECT** status
- Tempo
- **TRANSPOSE** status
- **MANUAL PERCUSSION** sound

1. Press the **SUB BALANCE/MIDI** button two times.

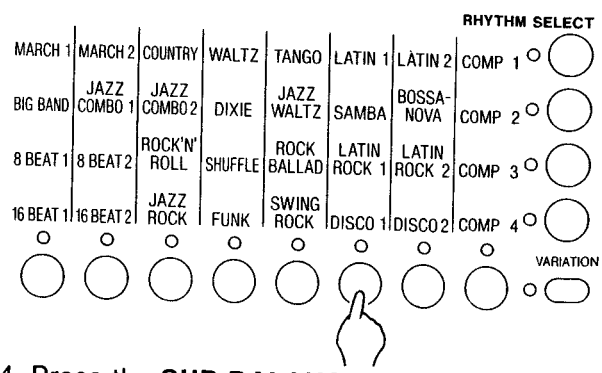


2. While " M I d I " is shown on the display, press either **TEMPO** button.

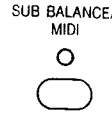


- " P L 1 " is shown on the display.

3. In the **RHYTHM SELECT** matrix, press the third button from the right in the horizontal row to turn it on.



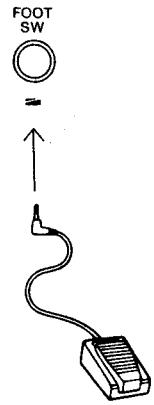
4. Press the **SUB BALANCE/MIDI** button to turn it off.



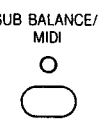
Assigning a function to the foot switch

If the SZ-P1 foot switch (sold separately) is connected, the default function assigned to the foot switch is the rhythm start/stop; however, you can assign a different function to the foot switch.

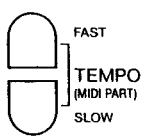
Connection



1. Press the **SUB BALANCE/MIDI** button two times.



2. While " M I d " (KN200) or " M I d I " (KN400) appears on the display, use the **TEMPO**'s **SLOW** or **FAST** button to select " F U n " (function) on the display.



- The indicator flashes.

3. Use the **POLY** (KN200) or **POLY 1** (KN400) **BALANCE** buttons to assign the desired function to the foot switch.

Display	Function
SUS	Sustain on/off
GLd	Glide effect*
tEC	TECHNI-CHORD on/off
Str	START/STOP
F IL	FILL IN
End	INTRO & ENDING

*Glide effect: As long as the foot switch is depressed, the pitch of the pressed keyboard keys is lowered by a half-tone; when the foot switch is released, the pitch returns to normal.

The glide effect works for the following sounds: **GUITAR, JAZZ GUITAR, SOLID GUITAR, ROCK GUITAR, MUTE GUITAR, HAWAIIAN GUITAR, BANJO, VIOLIN, BRASS, TRUMPET, SYNTH BRASS 1, 2, TROMBONE, FRENCH HORN, TENOR SAX, ALTO SAX, HARMONICA, CLARINET, PAN FLUTE, FLUTE, WHISTLE, SPECIAL 1, 2, 3, 5, 6**

4. Press the **SUB BALANCE/MIDI** button to turn it off.

Modulation depth

■ **KN200**

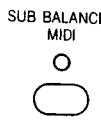
You can set the vibrato depth for modulation data received through the MIDI terminals.

■ **KN400**

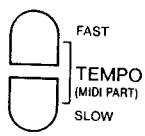
You can set the vibrato depth of this instrument's **MODULATION** control and for modulation data received through the MIDI terminals.

- The modulation depth can be set independently for each of these parts:
  KN200: **POLY**
  KN400: **POLY 1**, **POLY 2**, **ACCOMP 1**, **2**, **3**, **BASS**

1. Press the **SUB BALANCE/MIDI** button two times.



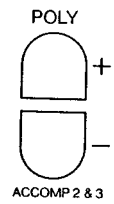
2. While " M I d " (KN200) or " M I d I " (KN400) appears on the display, use the **TEMPO**'s **FAST** or **SLOW** button to display the desired part name on the display.

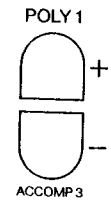


- The indicator flashes.

3. Use the **POLY** (KN200) or **POLY 1** (KN400) **BALANCE** buttons to adjust the vibrato depth.
- The settable range of the vibrato depth is 0~9.

KN200 KN400





- The higher the number, the more pronounced the vibrato.

4. Repeat steps 2 and 3 to set the vibrato depth for the other parts.

5. When the vibrato depth has been set for all the parts as desired, press the **SUB BALANCE/MIDI** button to turn it off.

ENGLISH

Initializing the function settings

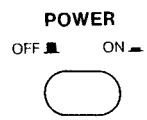
■ **KN200**

When the keyboard is turned off, all of the stored memories of the **SEQUENCER** and settings for MIDI, the foot switch, etc. are erased and return to their factory-preset (initialized) status.

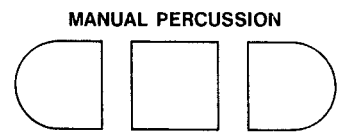
■ **KN400**

The various memory contents and settings of the **SEQUENCER**, **COMPOSER**, MIDI, foot switch, etc. remain in the internal memory of the instrument for about one week even after the **POWER** button is turned off. To reset all the memories and settings to their factory-preset status (initialized settings), follow the procedure below.

1. Press the **POWER** button to turn off the instrument.



2. While depressing all three **MANUAL PERCUSSION** buttons, press the **POWER** button to turn on the instrument.



Part V

MIDI

What is MIDI?

MIDI (Musical Instrument Digital Interface) is the international standard for digital communication of electronic musical instrument data.

This means that any equipment which has a MIDI terminal—such as electronic musical instruments and personal computers—can easily exchange digital data with other MIDI equipment without resorting to complicated conversions or connections.

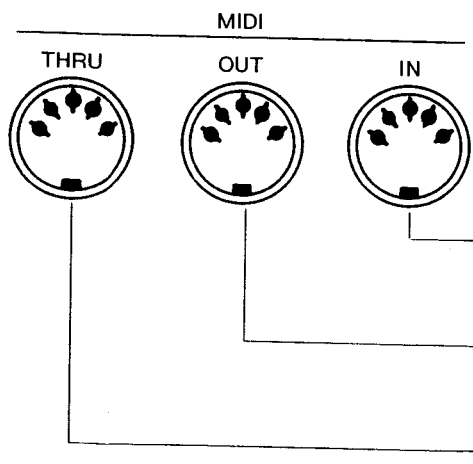
What can you do with MIDI?

Control another connected MIDI keyboard
By playing on one MIDI keyboard, you can produce a performance on one or more connected MIDI keyboards. If different sounds and effects are assigned to each keyboard, one person playing on one keyboard can produce an ensemble performance of many instruments. Another use would be to centrally control the sounds, effects and volumes of connected instruments on one keyboard.

Automatic performance on the keyboard
If performance data for a MIDI instrument is stored in a computer or MIDI sequencer, the stored data can be used for automatic performance of the MIDI instrument.

Synchronized performance
Play along with a connected MIDI sequencer or rhythm machine for a synchronized performance.

About the MIDI terminals



IN: The terminal by which this instrument receives data from other equipment.

OUT: The terminal that transmits data from this instrument to other equipment.

THRU (KN400):
The terminal that transfers data from the **IN** terminal directly to other equipment.

- For these connections, use a commercially available MIDI cable.

ENGLISH

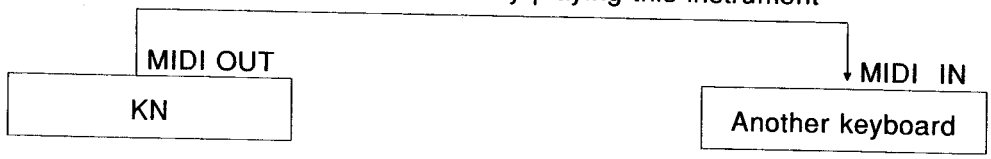
The following kinds of data can be transmitted/received

- Keyboard key note (keyboard on/off) data
- Keyboard velocity data (KN200: receive only)
- Pitch bend data (KN400)
- Control change data
  - modulation
  - balance
  - main volume
  - sustain
  - rhythm variation
  - fill in, intro & ending
  - digital celeste
- Program change data (sound for each part, and **DRUMS** instrument)
- Clock signal
- Start/stop data

Note: Data cannot be transmitted/received when the **DEMO** ♪ button is on.

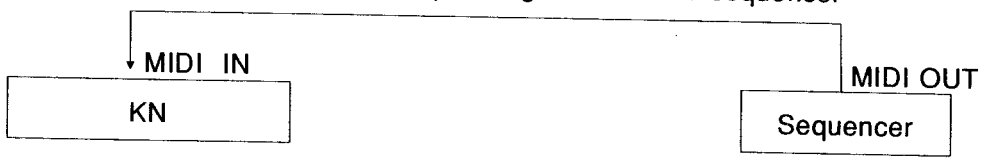
Connection examples

■ To generate sound from a connected instrument by playing this instrument



■ To generate sound from this instrument by playing a connected instrument

■ To generate sound from this instrument by operating a connected sequencer



Basic channel

There are 16 basic channels (1~16) for MIDI signals. The channels on the transmission side and receiving side must match before keyboard on/off data, sound data, effect data, etc. can be exchanged.

The default settings are as follows:

■ KN200

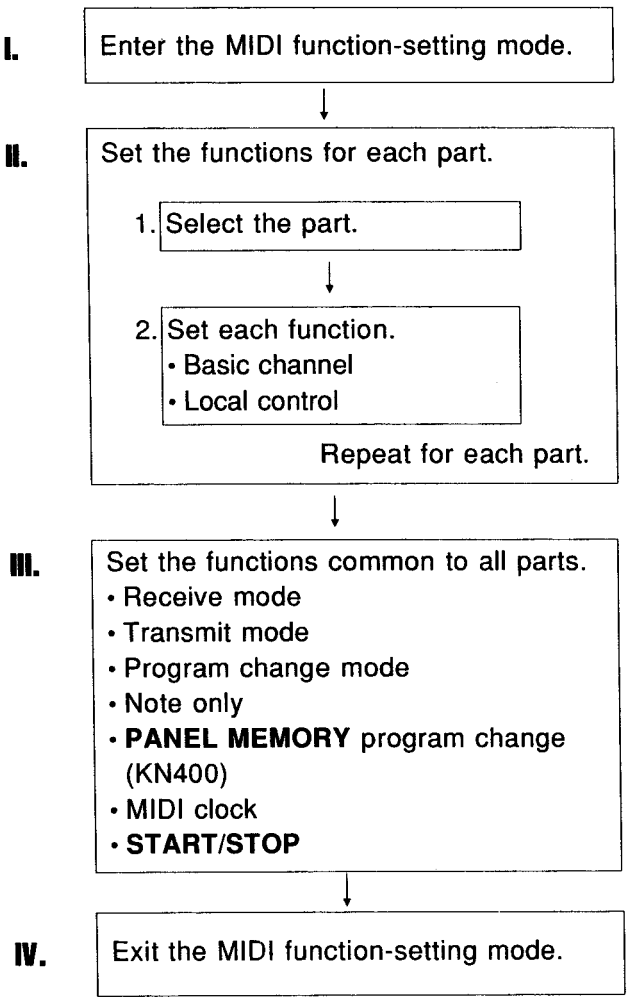
Part	Channel
POLY	1
BASS	3
ACCOMP 1	5
ACCOMP 2	9
ACCOMP 3	10
DRUMS	15
CONTROL	16

■ KN400

Part	Channel
POLY 1	1
POLY 2	4
BASS	3
ACCOMP 1	5
ACCOMP 2	9
ACCOMP 3	10
DRUMS	15
CONTROL	16

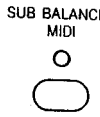
Setting MIDI functions

Here is an outline of the procedures for setting the various MIDI functions:

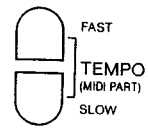


I. Enter the MIDI function-setting mode

1. Press the **SUB BALANCE/MIDI** button two times.



2. While " M I d " (KN200) or " M I d I " (KN400) appears on the display, press either **TEMPO** button.



II. Set the functions for each part

■ Select the part

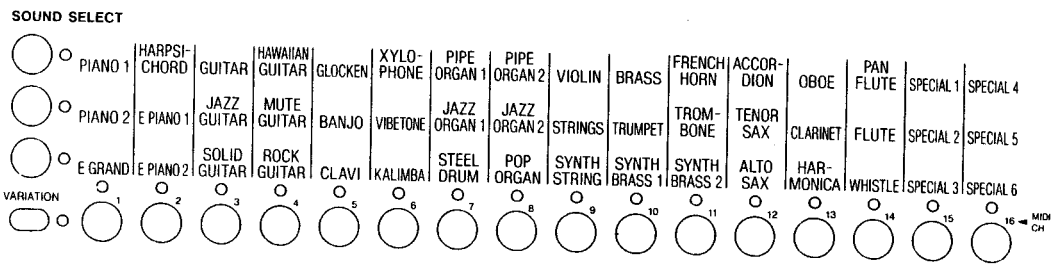
Select the part whose functions you wish to set first with the **TEMPO** buttons.

- The indication for the selected part will appear on the display.

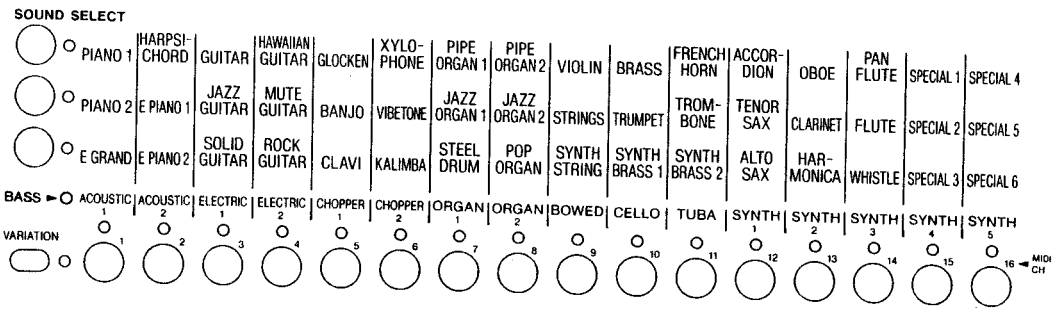
■ Basic channel

In the **SOUND SELECT** matrix, use the horizontal row of buttons to select a channel (1~16).

KN200



KN400



- Channel 16 is reserved for the **CONTROL** part, so select from channels 1~15.
- It is not necessary to set the functions for the **CONTROL** part, which is for transmitting/receiving **MAIN VOLUME** data. Basic channel 16 is automatically assigned for this part.
- The same basic channel cannot be assigned to two or more parts. If you selected a channel which has already been set, an error beep sounds.

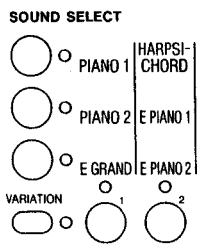
■ Local control

Specify, for each part, whether the performance played on this instrument's keyboard is output by this instrument's sound generator or not.

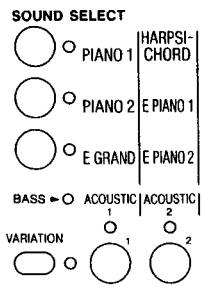
Local control on	Local control off
Notes play on this instrument's keyboard are output by this instrument's sound generator and are sent to the **MIDI OUT** terminal.	Notes played on this instrument's keyboard are not output by this instrument's sound generator but are sent to the **MIDI OUT** terminal.

Set local control to on/off by using the **VARIATION** button.

KN200



KN400



- The lit **VARIATION** indicator means the local control on status.

Set the MIDI functions for each of the other parts.

III. Set the functions common to all parts

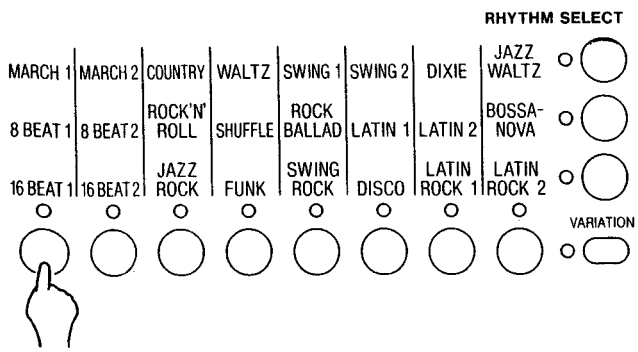
■ Receive mode

Set to the single mode when you wish to receive data using only one basic channel. Set to the multi mode when you wish to receive data on multiple channels.

Single mode (off)	Multi mode (on)
Performance data is received only for the basic channel assigned to the **POLY** (KN200) or the **POLY 1** (KN400) part. The performance is controlled by this instrument's **AUTO PLAY CHORD** and **CONDUCTOR** (KN400) settings (the same as when you play this instrument's keyboard).	In this mode the KN200/KN400 is used as a sound generator, and data can be received independently for all sound parts for which a basic channel is assigned.

For example, select single or multi for the receive mode by using the leftmost button in the horizontal row of the **RHYTHM SELECT** matrix.

Off .....Single mode On .....Multi mode



- In multi mode, the maximum number of notes which can be generated for each part is as follows:

POLY*/POLY 1**	4 notes
ACCOMP 1	4 notes
ACCOMP 2	3 notes
ACCOMP 3	
BASS	1 note
DRUMS	4 notes

*KN200 **KN400

■ Transmit mode

You can send data for the automatic accompaniment pattern of the **AUTO PLAY CHORD.**

APC mode (on)	Chord mode (off)
The **AUTO PLAY CHORD**'s **ACCOMP** and **BASS** patterns which are formed by playing chords on this instrument's keyboard are transmitted as performance data.	The chord data is transmitted exactly as the chords are played on the keyboard.

■ Program change mode

You can match the sound change data when transmitting/receiving between different Technics instruments.

Normal (off)	Technics (on)
The program change numbers correspond to the order of the sounds as they are lined up from the leftmost sound of the bottom row and beginning with 1. The **KEYBOARD PERCUSSION** instrument sounds correspond to the Keyboard's key note numbers.	Program change numbers are standardized among all Technics models which are set to this mode: the program change number assigned to a given sound on one model is assigned to the same sound on all models in the same mode. The **KEYBOARD PERCUSSION** instrument types correspond to the same key note numbers for connected Technics models set to this mode.

■ NOTE ONLY

on	off
Of the channel voice message, only note on/off and all-note-off data is transmitted/received.	All channel voice message data used in the KN200/KN400 can be transmitted/recieved.

■ PANEL MEMORY program change (KN400)

Enable (on)	Disable (off)
You can transmit/receive program change data from the **PANEL MEMORY** buttons **1~4** through the **POLY 1** basic channel.	You cannot transmit/receive program change data from the **PANEL MEMORY** buttons.

■ MIDI clock

Internal clock (off)	External clock (on)
This instrument's **RHYTHM** and **SEQUENCER** performance is controlled by the internal clock, not by the connected instrument's clock.	This instrument's **RHYTHM** and **SEQUENCER** performance is controlled by the connected instrument's clock.

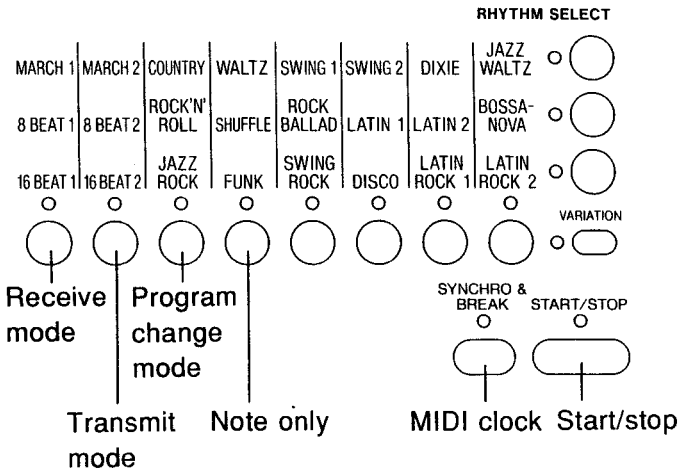
■ **START/STOP**

Enable (on)	Disable (off)
RHYTHM and **SEQUENCER** start/stop data are received/transmitted.	**RHYTHM** and **SEQUENCER** start/stop data are not received/transmitted.

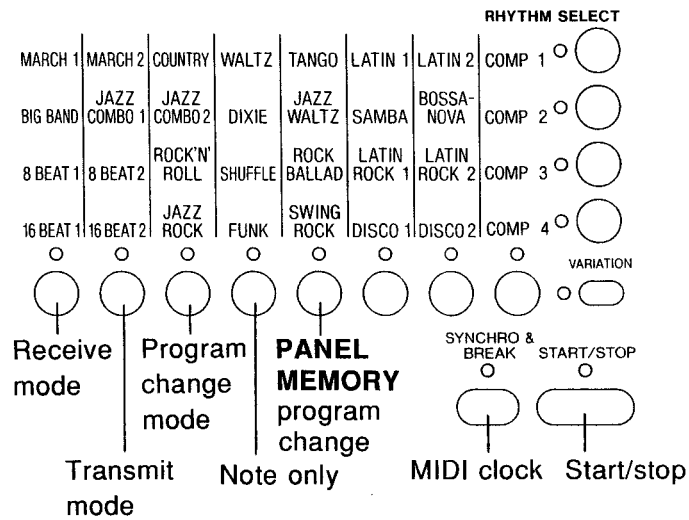
Set the on/off status of each of the above modes by using the buttons in the horizontal row of the **RHYTHM SELECT** matrix.

- In the modes described above, the "on" and "off" indications refer to the corresponding button's on/off status.

KN200

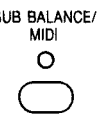


KN400



IV. Exit the MIDI function-setting mode.

When you have finished making all the settings, press the **SUB BALANCE/MIDI** button to turn it off.



MIDI Implementation Chart

Keyboard
[SX-KN200/SX-KN400]

(Transmitted)

Function		POLY (KN200)/ POLY 1 (KN400)	POLY 2 (KN400)	ACCOMP 1	ACCOMP 2	ACCOMP 3	BASS	DRUMS	CONTROL	Remarks
Basic Channel	Default	1~16	1~16	1~16	1~16	1~16	1~16	1~16	1~16	memorized
	Changed	1~16	1~16	1~16	1~16	1~16	1~16	1~16	1~16	
Mode	Default	3	3	3	3	3	3	3	3	OMNI OFF POLY MODE
	Messages	×	×	×	×	×	×	×	×	
	Altered	—	—	—	—	—	—	—	—	
Note Number		31~102	31~102	31~102	31~102	31~102	31~102	36~69**	—	Changes depending on the position of the transpose control.
	True voice	—	—	—	—	—	—	—	—	
Velocity	Note ON	× (KN200) ○ (KN400)	× (KN200) ○ (KN400)	× (KN200) ○ (KN400)	× (KN200) ○ (KN400)	× (KN200) ○ (KN400)	× (KN200) ○ (KN400)	× (KN200) ○ (KN400)	—	
	Note OFF	× (9nH:v=0)	× (9nH:v=0)	× (9nH:v=0)	× (9nH:v=0)	× (9nH:v=0)	× (9nH:v=0)	× (9nH:v=0)	—	
After Touch	Key's	×	×	×	×	×	×	×	×	
	Ch's	×	×	×	×	×	×	×	×	
Pitch Bender		× (KN200) ○ (KN400)	× (KN200) ○ (KN400)	× (KN200) ○ (KN400)	× (KN200) ○ (KN400)	× (KN200) ○ (KN400)	× (KN200) ○ (KN400)	×	×	
Control Change	1	× (KN200) ○ (KN400)	× (KN200) ○ (KN400)	× (KN200) ○ (KN400)	× (KN200) ○ (KN400)	× (KN200) ○ (KN400)	× (KN200) ○ (KN400)	×	×	modulation
	7	○	○	○	○	○	○	○	×	volume
	64	○	○	○	×	×	○	×	×	sustain
	80	×	×	○	×	×	×	×	×	auto play chord
	82	×	×	×	×	×	×	○	×	intro & ending, fill in
	93	○	○	×	×	×	×	×	×	chorus
Prog Change		○	○	○	× (KN200) ○ (KN400)	× (KN200) ○ (KN400)	○	○	×	
	True #	—	—	—	—	—	—	—	—	
System exclusive		×								
System common	Song Pos	×								
	Song Sel	×								
	Tune	×								
System Real Time	Clock	○								
	Commands	* ○ ×								start/stop, continue
Aux Messages	Local ON/OFF	×	×	×	×	×	×	×	—	
	All notes OFF	○	○	○	○	○	○	○	—	
	Active Sense	○								
	Reset	×								

Notes

* ○ × .....Whether or not the data for each of these items is transmitted can be set.

When the program change mode is set to Technics (on), note numbers for **DRUMS differ.

Mode 1: OMNI ON, POLY **Mode 2:** OMNI ON, MONO ○: Yes
Mode 3: OMNI OFF, POLY **Mode 4:** OMNI OFF, MONO ×: No

Keyboard
[SX-KN200/SX-KN400]

MIDI Implementation Chart

(Recognized)

Function		POLY (KN200)/ POLY 1 (KN400)	ACCOMP 1	ACCOMP 2	ACCOMP 3	BASS	DRUMS	CONTROL	Remarks
Basic Channel	Default	1~16	1~16	1~16	1~16	1~16	1~16	1~16	memorized (KN400)
	Changed	1~16	1~16	1~16	1~16	1~16	1~16	1~16	
Mode	Default	3	3	3	3	3	3	3	OMNI OFF POLY MODE
	Messages	×	×	×	×	×	×	×	
	Altered	—	—	—	—	—	—	—	
Note Number		0~127	0~127	0~127	0~127	0~127	36~69***	—	Changes depending on the sound.
	True voice	36~119	36~119	36~119	36~119	24~107	36~69	—	
Velocity	Note ON	○	○	○	○	○	○	—	
	Note OFF	×	×	×	×	×	×	—	
After Touch	Key's	×	×	×	×	×	×	×	
	Ch's	×	×	×	×	×	×	×	
Pitch Bender		○	○	○	○	○	×	×	
Control Change	1	○	○	○	○	○	×	×	modulation
	7	○	○	○	○	○	○	×	volume
	64	○	○	○	○	○	×	×	sustain
	80	×	○	×	×	×	×	×	auto play chord
	82	×	×	×	×	×	○	×	intro & ending, fill in
	93	○	×	×	×	×	×	×	chorus
Prog Change		0~47	0~47	0~47	0~47	0~15	0~23 (KN200)		
	True #	0~3** (KN400)					0~31 (KN400)		
System exclusive		×							
System common	Song Pos	×							
	Song Sel	×							
	Tune	×							
System Real Time	Clock	○							
	Commands	* ○ ×							start/stop, continue
Aux Messages	Local ON/OFF	×	×	×	×	×	×	—	
	All notes OFF	○	○	○	○	○	○	—	
	Active Sense	○							
	Reset	×							
Notes		* ○ × .....Whether or not the data for each of these items is transmitted can be set. **P. MEMO/P. CG ***When the program change mode is set to Technics (on), note numbers for **DRUMS** differ.							

Mode 1: OMNI ON, POLY
Mode 2: OMNI ON, MONO
Mode 3: OMNI OFF, POLY
Mode 4: OMNI OFF, MONO

○: Yes
×: No

W D Greenhill & Co, 1 Oxford Road, Rochford, Essex, SS4 1TG. UK. Member MITA Intl.
Tel/Fax +44 (0)1702 546195. Estbl: 1980 Web: wdgreenhill.com Email: bill@wdgreenhill.com

Largest independent stockist of parts and manuals for electronic musical instruments, as keyboards, organs, electronic pianos and accordions in Europe.
Agents for Kawai ~ Technics ~ Yamaha for parts and manuals.
Thousands of parts for most other makes in stock.

Our library of Service and Owners Manuals, which is in excess of 7500 manuals, includes manuals from the following manufacturers:-
ACE – ARMON – ARP - AVANTE GUARDE – BACHMAN – BALDWIN – BELTON – BENTLEY – BIRD BONTEMPI – BROTHER – BURGE – CANTOR – CASIO – CAVENDISH – COMPTON – CONN – CORDOVOX CRB – CRUMAR – DUBREQ – EKO – ELKA – EMINENT – EMS – EXCELSIOR – FARFISA – FATAR GALANTI – GEM – GIACCALIA – GIDIELLI – GIULIETTE – GODWIN – GULBRANSEN - H&H – HAMMOND HOHNER – JEN – JHS – JOHANNUS – JORDI – JVC – KAWAI – KENTUCKY – KETRON – KIMBALL – KORG KURSWEIL – LEM – LESLIE – LIRA – LIVINGSTON – LOGAN – LOWREY – MAKIN – MARK MARLBOROUGH – McGREGOR – MILLER – MILTON – MOOG – MULTIVOX - NEW WORLD – NIPPON NORWICH – OBERHEIM – ORLA – PHILIPS – PIERMARIA – RHODES – RIHA – RODGERS – ROLAND SELMER – SEM – SEQUENTIAL – SHARMA - SIEL – SOLTON – TECHNICS – THOMAS – VISCOUNT – VOX WELSON – WEM – WERSI – WURLITZER – YAMAHA – ZACHARY - ZERO SETTE **and many other makes.**

We stock many thousands of parts for the above instruments, including a wide selection of mechanical and electronic components, including those 'difficult to obtain' divider and TOS chips, as SAJ110 – M108 – M208 – M147 – M086 ….. **and countless other parts, far too many to detail.**

We also stock parts for **Rhodes** and **Wurlitzer** pianos, and ***the original Hammond oil.***

Payment is accepted by **VISA, MasterCard, Switch, American Express,** and by cheque or Draft in UK pounds drawn on a UK based bank, with all charges prepaid. We also accept **PayPal** with payments made to us in Pounds Sterling through our email address of bill@wdgreenhill.com

ESSENTIAL. When placing a Card order, please supply the full Cardholders name and address (which MUST include the Post Code or Zip), the Card number (16 digits), the expiry date AND, NOW THE CSC NUMBER WHICH IS COMPULSARY. The CSC is the last three digits of the 7 digit number on the reverse of the card by the signature strip.
The CSC number is an essential anti fraud measure which combines with the Address Verification Service to give you added Card protection.
WE MUST NOW HAVE THIS CSC NUMBER TO COMPLETE THE CARD TRANSACTION.
For Switch cards add the 'Issue' number (where shown) and both 'valid from' and 'expiry' dates.

Our Bankers are: Co-operative Bank plc, PO Box 250, Salford Central Commercial Branch,
Delf House, Southway, Skelmersdale, WN8 6WT.
Bank Sort Code: 08-92-50. A/C No: 70327810. SWIFT: CPBKGB22.
IBAN: GB49CPBK08925070327810.

We welcome your enquiries, and we look forward to being of service to you. Please call us with your needs. We will always try to help.

Bill Greenhill. W D Greenhill & Co.